Somerset County Council.

## REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1934.

WILLIAM G. SAVAGE,

B.Sc., M.D. (Lond.), D.P.H., County Medical Officer of Health.



### Somerset County Council.

## REPORT

OF THE

## MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1934.

WILLIAM G. SAVAGE,

B.Sc., M.D. (Lond.), D.P.H., County Medical Officer of Health. Digitized by the Internet Archive in 2018 with funding from Wellcome Library

#### CONTENTS

				Page
ARTIFICIAL LIGHT TREATMEN	NT .	• •	• •	16
Births	• •	• •	• •	2
BIRTH CONTROL	• •	• •	• •	20
CANCER	• •	• •	• •	2
CEREBRO-SPINAL MENINGITIS	• •	• •	• •	5
CHILDREN AND YOUNG PER	sons Act, 1932	• •	• •	21
DEATHS	• •	• •	• •	2
DEATH RATES	• •	• •	• •	2
DIPHTHERIA	• •	• •	• •	5
Encephalitis Lethargica	• •	• •	• •	5
Enteric Fever	• •		• •	5
HEALTH PROPAGANDA	• •	• •	• •	29
Housing	• •	• •	• •	39
Infant Visiting	• •	• •	• •	20
Infantile Mortality	• •	• •	• •	2, 18
Isolation Hospital Accom	MODATION	• •	• •	5
LABORATORY, PUBLIC HEAL	тн	• •	• •	48
NURSING AND MATERNITY I	Homes	• •	• •	19
Measles	• •	• •	• •	5
MEAT CONTROL	• •	• •	• •	43
MENTAL TREATMENT ACT, 1	930	• •	• •	30
MIDWIVES	• •	• •	• •	18
MILK SUPPLY	• •	• •	0~0	44
Ophthalmia Neonatorum	• •	• •	• •	19
ORTHOPAEDIC SCHEME	• •	• •	• •	28
Poliomyelitis	• •	• •	. •	6, 28
Population	• •	• •	• •	2
PUERPERAL FEVER	• •	• •	• •	19
Quantock Sanatorium	• •	• •	0-6	15
RICKETS AND OTHER ABNOT	RMAL CHILDREN	• •	• •	24
RIVER POLLUTION	• •	• •	• •	<b>3</b> 8
SALE OF FOODS AND DRUG	s Acts	• •	• •	47
SCARLET FEVER	• •	• •	0~0	5
Sewerage	• •	• •	0~0	38
SMALL POX	• •	• •		5
Tuberculosis	• •	• •	₩	8
VENEREAL DISEASES	• •	• •	•-•	7
WATER SUPPLY	• •	• •	•	31
Whooping Cough	• •	0~0	0-0	5

## To the Chairman and Members of the Public Health and Housing Committee, Somerset County Council.

GENTLEMEN,

I beg to submit my twenty-sixth Annual Report upon the Health Administration of the County. The Ministry of Health has arranged to supply the mortality statistics to each Medical Officer to save separate compilation, and these figures have been adopted in the Tables.

The vital statistics for the year are very satisfactory. The death rate is low, the tuberculosis death rate the lowest on record, while the rate of infantile mortality is also the lowest recorded.

The report is on lines similar to those of previous years. A good deal of special information is given as to rural water supplies as these have occupied much time during the year. Special attention has also been given to rural housing conditions and the efforts being made to eliminate the unfit, worn out, irrepairable (at reasonable cost) cottage.

A large part of my Report is now taken up with details of the Health work undertaken by the County Health Department, but a brief survey is also given of the general sanitary conditions in the County.

Your obedient servant,

Weston-super-Mare,

W. G. SAVAGE.

July, 1935.



#### STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres):—1,028,777.

Population (1934):—403,500.

Births:—Total, 5,488; Legitimate, 5,253; Illegitimate, 235; Stillbirths, 234.

Deaths:—Total, 5,063; Urban, 2,321; Rural, 2,742.

Deaths of children under 1 year of age: -248.

Rateable Value: £2,357,266 (1934).

Sum represented by a penny rate: -£8,703(1933-34); £9,158(1934-35); £9,437(1935-36).

Birth rate:—13.60.

Death rate:—12.55.

Rate of infantile mortality:—45.19.

Percentage of births which were illegitimate:—4.28.

The birth rate is slightly higher than for the previous year.

The death returns are corrected as regards the distribution of deaths to the districts to which they properly belong. To correct for differences of age and sex distribution a standardizing factor has to be used based upon the census figures. So corrected the following figures are obtained:—

		$Net \ Death ext{-} rate.$	$Standardizing \ Factor.$	$Standardized \ Death-rate.$
Rural Districts	 	12.31	0.82	10.09
Urban Districts	 	12.84	0.82	10.53
Administrative County	 	12.55	0.82	10.29
England and Wales	 	11.8		11.8

Somerset now contains a high proportion of old people and this is reflected in the difference between the net and standardized death rates. Compared with a population of standard age and sex distribution, which is what the standardized rate permits, it shows a rate of 10.29, which is very low, but above the lowest on record for the County, *i.e.* 9.21.

The causes of death are set out in Tables A. and B. at the end of the Report. Table A. shows that heart diseases are responsible for the largest number of deaths from one single group of causes (1,148 deaths), cancer and other forms of malignant disease the next largest (710 deaths), bronchitis and pneumonia caused 385 deaths, while tuberculosis caused 215 deaths.

As pointed out in previous years, we cannot hope to lower the death rate further to any great extent but must aim at a postponement of the period of death. Table I. shows that this is taking place.

TABLE I.

Proportion of the deaths in each year divided amongst the different age groups.

	•		O	0 0
	Under 1 year.	1—45.	45—65.	65 and over.
1911	12.9	21.0	20.8	45.3
1912	10.6	21.0	23.0	45.4
1913	10.8	23.3	21.0	44.9
1914	9.2	22.0	22.3	46.5
1920	9.7	19.1	22.3	48.9
1921	9.3	18.0	23.1	49.6
1922	6.6	17.3	22.2	53.9
1923	7.0	18.7	23.1	51.2
1924	7.1	17.5	21.8	53.6
1925	6.5	17.0	22.2	54.3
1926	6.9	16.0	22.3	54.8
1927	5.3	15.3	23.5	55.9
1928	5.6	16.6	23.2	54.6
19 <b>2</b> 9	5.2	14.8	22.3	57.7
1930	5.6	15.5	23.4	55.5
1931	<b>5.</b> 6	15.1	22.7	56.6
1932	5.3	14.1	23.2	57.4
1933	4.7	13.9	22.3	59.1
1934	4.9	13.3	23.4	58.4

TABLE II.
Rural Districts.

Year.	Population estimated	Вікт	CHS.		UNDER R OF AGE.	Deaths Ages.	AT ALL
I EAR.	to middle of each Year.	Number.	Rate.	Number.	Rate per 1,000 Births registered.	Number	Rate.
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 Averages for years 1924—1933	231,200 231,100 231,700 233,000 235,440 235,500 232,040 230,100 231,400 222,801	3,907 3,735 3,654 3,507 3,615 3,459 3,465 3,442 3,315 3,069	16.89 16.16 15.77 15.05 15.35 14.69 14.93 14.96 14.32 13.61	201 183 180 165 155 166 162 181 160 140	51.45 49.0 49.26 47.04 42.88 47.99 46.76 52.59 48.27 45.62	2,820 2,802 2,728 2,891 2,754 3,012 2,747 3,076 2,888 2,851	12.20 12.12 11.77 12.41 11.70 12.37 11.84 13.37 12.48 12.65
1934	222,691	3,204	14.39	146	45.57	2,742	12.31
			Urban Dis	stricts.	·		_
1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 Averages for years 1924—1933	167,100 166,900 167,800 168,500 169,810 171,060 172,830 173,750 176,700 180,529	2,597 2,436 2,423 2,262 2,336 2,233 2,340 2,260 2,250 2,105	15.54 14.60 14.44 13.42 13.76 13.05 13.54 13.01 12.74 11.73	149 133 137 100 114 108 104 114 114 115	57.37 54.60 56.54 44.21 48.80 48.37 44.44 50.44 50.67 49.88	2,066 2,045 1,902 2,110 2,058 2,240 1,986 2,193 2,239 2,331	12.32 12.25 11.33 12.52 12.12 13.11 11.50 12.64 12.68 12.99
1934	180,809	2,284	12.63	102	44.66	2,321	12.84

#### GENERAL PROVISION OF HEALTH SERVICES IN THE AREA

This was set out in detail in my Annual Report for 1930 and remains substantially unaltered.

#### PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

#### Acute Infectious Diseases.

The nine Isolation Hospital areas are set out in my Report for 1930. Progress towards completing the Scheme still continues to be slow.

Plans have been prepared for the extensions at the Taunton Isolation Hospital, but are not yet approved. The enlargement of the Axbridge Hospital is in hand. A site has been obtained for the South Somerset Hospital and an architect appointed. At Weston-super-Mare, a new administrative block and a separate cubicle block were approved by the Ministry of Health and the work started in the early autumn.

Small Pox. I am glad to be able to report that there were no cases of small-pox during the year in the County.

The 1934 vaccination figures are not yet available, but early in 1935 those for 1933 were reported. Of 5,042 births 1,305 were returned as successfully vaccinated. This gives only 26 per cent. vaccinated, the percentage varying from five in Norton Radstock and Clutton to fifty-eight in Langport and fifty-nine in Martock registration sub-districts.

**Diphtheria.** 296 cases were notified with 10 deaths, a case mortality of 3.4 per cent. The distribution of the cases is shown in Table III. The number of cases was low and the case mortality very low.

Scarlet Fever. The prevalence of this disease was above that for the previous year and 624 cases were notified. There was only one death, giving a case mortality of 0.16 per cent.

Enteric and Paratyphoid Fevers. Only 4 cases were notified, with no deaths.

Encephalitis Lethargica. Table III. shows that 11 cases were notified, and that these were distributed through the County and with no epidemic. There were, however, 11 deaths, a case mortality of 100 per cent.

Three cases of Cerebro-spinal Meningitis and 16 cases of acute Poliomyelitis were notified.

Measles and Whooping Cough. Neither disease is notifiable so the number of cases is not known. During the year there were 10 deaths from Measles and 13 deaths from Whooping Cough, both below the average.

Table III. shows that the incidence of notifiable infectious diseases in Somerset during 1934 was very low.

B

#### INFECTIOUS DISEASES.

#### TABLE III.

		1	1	1					3			
	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric and Paratyphoid Fevers.	Puerperal Fever.	Ophthalmia Neonatorum.	Cerebro-spinal Meningitis.	Dysentery.	Malaria.	Pneumonia.	Acute Poliomyelitis.	Encephalitis Lethargica.
URBAN Bridgwater Burnham Chard Clevedon Crewkerne Frome Glastonbury Ilminster Minehead Norton-Radstock Portishead Shepton Mallet Street Taunton Watchet Wellington Wells Weston-super-Mare Yeovil	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 30 1 2 0 9 1 1 17 21 4 12 6 35 2 2 1 26 5	3 10 0 0 13 0 2 1 1 3 48 0 19 3 55 0	0 0 0 0 1 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	19 4 5 15 2 8 4 2 0 15 4 16 5 9 0 10 3 14 36	0 0 1 0 0 0 1 0 0 1 0 0 0 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Axbridge Bathavon Bridgwater Chard Clutton Dulverton Frome Langport Long Ashton Shepton Mallet Taunton Wellington Wells Williton Wincanton Yeovil	0 0 0 0 0 0 0 0 0 0 0	75 74 32 4 67 3 5 17 24 8 9 7 2 34 61 13	17 6 2 5 2 0 6 2 3 2 21 10 0 1 52 2	0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0	3 0 0 1 0 0 1 2 1 0 0 0 0 0 1 2 1 2 2	1 0 1 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0		36 11 10 15 17 16 18 6 22 9 11 8 12 1 22 33	0 0 0 1 0 0 7 0 1 0 1 0 0 0 0 1	1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
Urban Districts Rural Districts	0	189 435	165 131	2 2	5 6	16 11	0 3	0	0	171 247	6 10	5 6
Administrative County	0	624	296	4	11	27	3	1	0	418	16	11

#### VENEREAL DISEASES.

The attendances of Somerset cases at the different clinics for the year 1934 were as follows:-

			New Cases.				ATTENDANCES.			
Clinic.	New cases 1934	Attend- ances 1934	1931.	1932.	1933.	Increase or decrease during 1934.	1932.	1933.	Increase or decrease during 1934.	
Bath Bristol Yaunton Yeovil Bridgwater Frome Glastonbury Minehead Weston-super-Mare	17 72 88 59 55 23 19 22 44	663 797 972 819 1,100 259 351 225 1,198	15 62 58 59 15 6 5 8 43	16 54 74 64 33 4 5 23 41	11 63 58 60 50 11 19 14 37	+ 6 + 9 +30 - 1 + 5 + 12 - + 8 + 7	522 853 1,043 1,031 394 172 46 132 1,078	319 885 814 768 880 203 137 145 811	+344 - 88 +158 + 51 +220 + 56 +214 + 80 +387	
All Clinics	399	6,384	271	314	323	+76	5,271	4,962	+1,422	

The figures show a considerable increase both in new cases and in total attendances. This is not confined to any one clinic but is common to all, except Bristol. The largest increase was at Weston-super-Mare. It probably, therefore, indicates an increase in prevalence, not merely increased use of our clinics.

Medical Practitioners in the County qualified to receive supplies of arsenobenzol compounds can obtain them free of charge on request to the County Medical Officer. Only 22 Medical Practitioners are on this free list.

Bacteriological work in connection with venereal diseases is arranged for either in connection with Bristol University Laboratory or at the County Health Laboratory.

During the year the following samples were examined:—

Samples.	For Medical Officers of Clinics.	For Medical Practitioners.	Total.
Wasserman Gonococcus Spirochetes Fixation and other	722	357 71 0	683 793 2
tests	. 80	2	82
	1,130	430	1,560

#### TUBERCULOSIS.

During the year arrangements were made for the transfer of the Chard Public Assistance Infirmary to the Public Health Committee for tuberculosis cases. This will provide 28 beds for adult non-pulmonary tuberculosis and 20 beds for advanced pulmonary tuberculosis. A separate block for the nursing and domestic staff had to be built and considerable alterations and redecoration work to be done to the ward block, so the Institution was not opened for tuberculosis cases until April, 1935.

TABLE IV.

Year.	Phthi	isis Deatl	rates.	Other Ti	iberculou	s Diseases	Tuberculosis Death-rate.		a population of 6,000.
1001.	Rural.	Urban.	County.	Rural.	Urban.	County.	County.	Phthisis.	All Tuberculosis
1901	0.88	0.84	0.871	0.18	0.23	0.202	1.073	354	435
1902	0.86	0.89	0.877	0.20	0.19	0.201	1.078	356	437
1903	0.94	0.76	0.879	0.19	0.34	0.251	1.130	357	459
1904	0.99	0.97	0.989	0.20	0.34	0.255	1.244	402	505
1905	0.90	0.91	0.905	0.14	0.18	0.162	1.067	367	433
1906	0.90	0.86	0.890	0.13	0.37	0.221	1.111	361	451
1907	0.83	0.85	0.842	0.24	0.26	0.253	1.095	341	445
1908	0.91	0.93	0.922	0.24	0.31	0.274	1.196	375	485
1909	0.82	0.85	0.833	0.24	0.27	0.255	1.088	338	441
1910	0.98	0.78	0.912	0.16	0.24	0.197	1.109	371	451
1911	0.83	0.76	0.804	0.15	0.39	0.240	1.044	327	424
1912	0.69	0.90	0.778	0.17	0.20	0.191	0.970	315	394
1913	0.74	0.67	0.721	0.15	0.30	0.239	0.960	293	389
1914	0.86	0.79	0.833	0.21	0.26	0.232	1.065	338	432
1915	0.84	1.13	0.960	0.18	0.23	0.201	1.160	389	471
1916	0.75	0.97	0.838	0.16	0.25	0.194	1.032	340	418
1917	0.90	1.05	0.962	0.18	0.21	0.191	1.153	390	468
1918	1.09	1.30	1.180	0.21	0.24	0.225	1.403	479	569
1919	0.85	0.90	0.871	0.21	0.22	0.212	1.083	355	439
1920	0.65	0.93	0.765	0.14	0.27	0.196	0.961	310	390
1921	0.63	0.76	0.685	0.16	0.30	0.220	0.904	278	367
1922	0.75	0.78	0.761	0.18	0.18	0.180	0.941	309	382
1923	0.65	0.76	0.696	0.19	0.22	0.206	0.902	282	366
1924	0.60	0.74	0.656	0.15	0.13	0.140	0.797	267	324
1925	0.61	0.73	0.659	0.12	0.14	0.126	0.784	268	319
1926	0.53	0.54	0.533	0.13	0.14	0.138	0.671	217	273
1927	0.55	0.64	0.586	0.13	0.13	0.130	0.716	237	290
1928	0.59	0.71	0.639	0.08	0.16	0.113	0.753	259	306
1929	0.55	0.65	0.593	0.11	0.14	0.121	0.714	240	289
1930	0.54	0.52	0.532	0.09	0.09	0.091	0.623	216	253
1931	0.45	0.65	0.533	0.14	0.12	0.131	0.664	216	270
1932	0.50	0.62	0.554	0.12	0.10	0.115	0.671	225	272
1933	0.44	0.51	0.472	0.14	0.09	0.118	0.590	192	240
1934	0.38	0.48	0.426	0.12	0.09	0.106	0 533	173	216

Table IV. shows that the death rate both for respiratory tuberculosis and for non-respiratory tuberculosis is the lowest on record. The whole tuberculosis death rate is definitely lower than for any previous year.

The actual results achieved are more clearly seen when the figures are calculated on a standard population of 406,000 (last column) which is nearly the Administrative County population. This column shows that as many as 289 fewer persons died from tuberculosis in the county in 1934 than would have been the case 30 years ago with the same population. 1904 was a year with a high rate, but taking the figure of 460 for a four-year average period the decline is 244, a reduction of 53 per cent.

The following figures show the deaths and notifications since 1916:-

#### TABLE V.

Year.	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	19 <b>2</b> 8	1929	1930	1931	1932	1933	1934
Deaths.	467	393	480	388	358	<b>3</b> 50	366	354	317	312	<b>26</b> 8	287	305	290	253	268	2 <b>73</b>	239	215
*Notifi- cations.	872	1036	949	. 922	860	882	732	707	701	<b>7</b> 69	729	703	713	605	640	585	565	479	511

<sup>\*</sup>These are primary cases only and do not include institutional cases.

Of the 215 deaths from tuber culosis, 34 were not notified.

TABLE VI.

New cases of tuberculosis and deaths from the disease in the County during 1934.

		New	cases.		Deaths.				
Age Periods.	Pulmonary.		Non-Pu	lmonary.	Pulmo	onary.	Non-Pulmonary.		
	M	F.	М.	F.	M.	F.	M.	F.	
υ1	0	0	3	1	0	0	1	2	
1—5	2	2	13	9	0	1	7	2	
5—10	9	6	25	13					
1015	10	10	13	9	2	1	3	3	
15—20	10	15	3	6	10	10			
20—25	28	38	4	7	16	16	0	0	
25—35	48	62	7	8			10		
35—45	29	26	4	5	45	42	13	6	
45—55	26	9	0	4	20	10			
55—65	23	12	0	2	22	16	1	4	
65 and upwards	3	5	2	0	9	2	1	0	
Totals	188	185	74	64	94	78	26	. 17	

TABLE VII.

Tuberculosis Notifications and Deaths.

URBAN DISTRICTS.		of primary notified. Non- Pulm.	Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.	RURAL DISTRICTS.	Number cases Pulm.	of primary notified. Non- Pulm.	Number of Deaths during the year from Pulmonary Tuberculosis.	Number of Deaths during the year from other varieties of Tuberculosis.
Bridgwater Burnham Chard Clevedon Crewkerne Frome Glastonbury Ilminster Minehead Norton-Radstock Portishead Shepton Mallet Street Taunton Watchet Wellington Wells Weston-s-Mare Yeovil	20 5 5 9 1 8 6 4 11 7 7 3 6 21 3 5 9 37 18	5 7 2 2 3 3 4 0 1 9 3 1 4 5 0 2 0 7 9	5 3 1 4 0 3 4 0 3 2 3 2 5 17 1 5 2 16 11	3 1 1 0 1 1 1 0 0 0 0 0 0 2 1 1 0 2 1	Axbridge Bathavon Bridgwater Chard Clutton Dulverton Frome Langport Long Ashton Shepton Mallet Taunton Wellington Wells Williton Wincanton Yeovil	31 19 13 10 8 8 7 12 17 5 14 4 18 10 8	9 7 3 3 5 3 0 4 8 2 7 2 1 5 5 7	16 7 5 10 5 4 2 3 6 2 7 5 2 6 1 4	4 3 1 1 0 2 0 2 3 0 3 2 1 3 1
Totals	185	67	87	16	Totals	188	71	85	27

Sanatorium or Hospital treatment was given to 251 cases. In addition many open-air shelters were provided, those in actual use on December 31st, 1934, being 88. The number of shelters available is 96. Milk, for a period of six or eight weeks, was provided for 83 cases, Dental treatment for 7 cases, X-Ray examinations for 65.

Treatment by the use of artificial pneumothorax has been extended and the cases dealt with are shewn in the following table:—

	A	t Dispensa	ry or home	of patient.	At Quantock Sanatorium.	Total.
Primary induction	s	• • •	1		14	15
Refills	• • •	• • •	190		155	345

The X-Ray work at Quantock Sanatorium consisted of 7 films taken and 453 screening of cases.

Unused buildings at Quantock Sanatorium were again utilised during 1934 as a Summer Camp. Children were selected who were predisposed to tuberculosis on account of general debility or undernourishment, with special attention to those from homes in which there was an active case of tuberculosis. Of such children, 40 girls and 40 boys for four weeks and three weeks respectively, were given treatment under open-air conditions and on the lines of a holiday camp. The increase in weight and marked improvement in general health which resulted was again satisfactory, and the Camp this year was a particular success, partly due to the very fine weather. This work must be regarded as an important piece of tuberculosis preventive work. The Staff utilised was almost entirely voluntary.

During the year the use of the Mantoux test to judge infection with the tubercle bacillus was continued. The old Von Pirquet test had been used to a certain extent but not systematically, and the Mantoux test appears to be more valuable. The following two tables give the actual figures, but no comments will be made until our results are more extensive.

	Cont	tacts of a	*	Other	Cases.	
T.B. + Res	Case. ult.	T.B. — Res	- Case. ult.	Res		Total.
		+	_	+	_	
82	16	33	76	65	127	399

#### AGE GROUPS.

0-1	1	12–	15	Over	15	
Res	ult	Res	sult	Res	ult	Total
+ ·		+		+	_	
110	171	56	45	14	3	399

TABLE VIII.

All cases under treatment. Complete results as regards working capacity.

Section and the last and the la							
All (1912-	years, 1934)	Cured.	Working.	Not Working.	Dead.	Lost sight of or Removed.	Total cases.
Men	Cases	1,041	377	262	1,490	624	2.704
	Percentage	28	10	7	39	16	3,794
Women	Cases	1,131	528	277	1,313	695	2044
Women	Percentage	29	13	7	33	18	3,944
Children	Cases	1,789	415	111	190	448	0.050
	Percentage	61	14	4	6	15	2,953
Un- Classified	Cases	0	0	0	124	229	050
	Percentage	0	0	0	35	65	353
Total	Cases	3,961	1,320	650	3,117	1,996	11.044
	Percentage	36	12	6	28	18	11,044

TABLE IX.

Admissions to Sanatorium during 1934.

Sanatorium.		Men.	Women.	Children.	Total.
Quantock Taunton Wincanton Compton Bishop Alton Hospital Bath Ortho. Hospital St. Olave's Hospital, London	000000	61 18 17 — —	61 19 16 — — —	  45 7 6 	122 37 33 45 7 6 1
Hobitost		96	97	58	251

 $\label{eq:TABLE} \textbf{X}.$  Cases treated through the County Dispensaries.

Dispensary.	Dispensar 19	treated at ies during 34. Uninsured.	Under treating Dispension Dec. 31st	saries	Total Dispensary Attendances 1934.	Total Persons examined 1934.
Bath (County) Bridgwater Bristol Chard Clevedon Frome Glastonbury Langport Minehead Radstock Shepton Mallet Taunton Wellington Weston-super-Mare Wincanton Yeovil	2 29 3 2 10 6 9 8 9 5 5 5 30 25 7 2 34	34 114 54 11 84 33 23 20 120 45 13 235 76 105 12 45	2 17 0 0 3 2 3 2 9 3 0 9 7 0 0 14	9 83 21 0 23 14 2 14 120 33 5 98 17 41 3 15	244 809 325 161 404 249 234 205 650 407 138 1,055 264 825 128 737	119 278 120 72 128 106 118 73 231 135 69 476 121 321 74 • 289

TABLE XI.

Table showing the work of the Dispensaries during the Year 1934.

	Pitt M	ONARY.	Non-Pu	LMONARY	Тот	AT	
Diagnosis.		Children.		1			GRAND
DIAGNOSIS.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	TOTAL.
A.—New Cases examined during the		- IVI. IV.	1/1. 1.	WI. I'.	1/1. 1/.	141. 1.	TOTAL.
year (excluding contacts)—  (a) Definitely tuberculous	1 18 120	9 10	5 15 — —	22 12 — —	123 135 2 5 140 169	31 22 5 1 133 129	311 13 571
B.—Contacts examined during the year—  (a) Definitely tuberculous  (b) Diagnosis not completed  (c) Non-tuberculous	5 4	5 1 — —		6 3	5 4 1 — 44 100	$ \begin{array}{cccc} 11 & 4 \\ - & 1 \\ 152 & 155 \end{array} $	24 2 451
C.—Cases written off the Dispensary Register as—  (a) Recovered	45 70	23 21	5 20	21 18	50 90 186 273	44 39 289 <b>2</b> 90	223 1,038
D.—Number of Cases on Dispensary Register on December 31st—	589 735 — —	144 124	<u>  </u>	148 112	638 804 3 5	292 236 5 2	1,970
1. Number of cases on Dispensary Register on January 1st	2,059		other are after disc	cases traces and control charge under the control cont	ases retu ler Head	rned	32
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	87			ten off du all causes)			130
5. Number of attendances at the Dispensary (including Contacts)	6,835		Domicilia	Insured ry Treat	ment on	the	74
7. Number of consultations with medical practitioners—  (a) Personal  (b) Other	539 1,952		Officers t	visits by to homes consultati	(including	losis	792
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	11,376	(a)	examin X-ray e	ns of s	ns made	in	399 65
11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above	1		on Disp	of "T.B. pensary r 31st	Register	cases on ··	505

Dr. Short, County Tuberculosis Officer, has drawn up the following remarks dealing with the treatment given under the County Council scheme and the results obtained.

#### Tuberculosis Officer's Clinical Report for 1934.

The year 1934 was one of steady progress, the dry summer with moderate average temperatures again proving beneficial to Chest patients.

More cases than usual were examined by the Tuberculosis Officers, owing to the increasing call upon their services as consultants by the local doctors, and this is a public service of very high value. It was found possible to exclude Tuberculosis in 1,022 of these "cases for diagnosis" to the relief of both patient and practitioner, and in only 15 cases was the diagnosis still in doubt at the end of the year. This is certainly a marked advance upon the uncertainty of diagnosis which used to obtain in such an invidious disease as Tuberculosis.

Contributors to this desirable state of things were the increasing number of X-ray examinations and of special tests such as the Mantoux reaction.

As regards treatment, more Artificial Pneumothorax refills have been undertaken at the County Dispensaries than before, although there were less primary inductions at Quantock Sanatorium, and there can be no question as to the value of this procedure in a number of cases who would respond to no other form of treatment. It is only a minority of cases who are suitable for such special measures as Artificial Pneumothorax and our main line of attack is still "rest, air and food", on carefully supervised lines, and those measures of prevention which have been thoroughly tried out and which have reduced the case incidence in so marked a degree.

During the year, 223 cases were written off as "cured" after five or more years treatment and observation, and only one case had to be restored to the register after having been written off in previous years. This speaks well for the permanence of the results.

I must again record the valuable work of the Care Committees and other voluntary helpers, as also the keenness and efficiency of the tuberculosis staff.

The new cases seen numbered 1,404, and were classified as follows:—

T.B.	Negative Positive Stage 1 Positive Stage 2 Positive Stage 3	•••	139 14 110 37	
Non-Pulmonary Tuberculosis.	Bones and Joints Abdominal Other Organs Peripheral Glands	•••	12 15 5 35	300
Not Tuberculous Diagnosis not completed on 31st I	•••	•••		67 1,022 15 1,404

L. J. SHORT.

Quantock Sanatorium. The Medical Superintendent, Dr. V. C. Martyn, has furnished the following Report:—

The Sanatorium has been open for the reception of 68 cases (33 males and 35 females) throughout the year 1934. During this time 122 cases have been admitted, of whom 61 were males and 61 females. 125 patients were discharged, 63 males and 62 females. Four cases were not T.B. The average stay for female patients was 220 days and for male patients 208 days. This is an average of about 30 weeks for each patient.

Treatment was carried out as in previous years, i.e., by rest, graduated exercise and work with good plain food under open-air conditions.

Artificial Pneumothorax.—Twelve inductions were attempted. Of these, 4 were either unsuccessful or had to be abandoned; the remaining 8 were greatly benefitted. There were no deaths. There were two aspirations and replacement by air and two aspirations where it was not considered advisable to replace by air. There were 113 refills for in-patients and 38 for out-patients, a total of 151.

X-Ray.—453 screenings and only 7 films were taken. I am looking forward to having our new up-to-date shock-proof X-Ray apparatus, when many more films will be taken.

It is only possible to judge whether a patient is suitable for artificial pneumothorax treatment after one has had him under observation for some time. More cases are being done this year as more suitable ones have been sent into the Sanatorium. In my opinion, it is useless to try artificial pneumothorax treatment if it is only to prolong a patient's life a few weeks or months.

Sanocrysin.—Fifteen patients received this treatment, but in four it had to be abandoned; the remaining patients improved considerably.

As from the beginning, amusements both in and out-doors are provided for the patients. During the winter, Whist Drives, Concerts, Pantomimes, Billiard Matches, Lectures, etc., are much appreciated. The library is made much use of, and we are always very grateful for fresh books, magazines, etc.

As I recorded last year, the food provided for the patients has been of the best quality and well cooked, and I receive practically no complaints.

Again I should like to thank Dr. Mecredy, the Matron, Sister and Nursing Staff, the Engineering Staff and Gardeners, for their loyal co-operation and devoted work for the patients.

#### RESULTS OF TREATMENT.

#### WEIGHTS.

Increase in weights in Kilos.

			r—	-6	6—12	12 a1	nd over.	Tota	ıl.	
Males	• • •	• • •	28	3	25		1	54		
Females	• • •	• • •	25		14		7	43		
The averag	ge gain	in	weight	of all	patients (117)	weighed	on discharge	=	4.73	kilos.
	,				male patients	,,	,,	=	5.03	,,
,	,		, ,	of 59	female patients	,,	,,	==	4.43	,,
The averag	ge loss	in	weight	of 20	patients weighed	d on disc	harge	=	1.97	

Seven patients were not weighed on discharge. The average gain in weight of 119 patients weight on discharge during 1933 was 5.31 kilos. In 1934 the average gain in weight of 117 patients was 4.73 kilos, showing a decrease of 0.58.

Working capacity of patients on admission and discharge.

		Full W	orking Capacity.	Fit fo	or light w	ork.	Unj	fit for work.
		Admissi	ion. Discharge.	Admissi	on. Disc	charge.	Admissi	on. Discharge.
Males	•••	0	39 = 62.90%	0	8 =	12.90%	62	15 = 24.19%
Females	•••	0	30 = 48.38%	0	13 =	20.96%	62	19 = 30.64%

On admission 100 per cent. were unfit for any work. On discharge 55.64 per cent. of all patients were fit for full work; 16.93 per cent. for light work; and 27.41 per cent. were unfit for work.

Classification on admission of patients discharged during 1934.

							Tuberc	le Bacilli.	
C1 '0 '		3.5				Posi	tive.	Nega	ative.
Classification.		M.	F.	Total	%	$\mathbf{M}$ .	F.	M.	$\mathbf{F}$ .
· · · · · · · · · · · · · · · · · · ·	• • •	1	5	6	4.84	0	0	1	5
· · · · · · ·	• •	59	56	115	92.74	26	28	33	28
Advanced	• •	2	1	3	2.42	2	1	0	0

Complications presented by the patients were: - Pleurisy, Peritonitis and Laryngitis.

#### TREATMENT WITH ARTIFICIAL LIGHT.

This work is being carried out under the Tuberculosis, Education and Maternity and Child Welfare Schemes. Four light treatment centres were in use during 1934 and 308 clinics were held. The new cases seen were 75, while the total attendances were 1,930. Of the cases, 20 were tubrculosis. The details are given in my Report for 1934 as School Medical Officer.

## TABLE XII.

# QUANTOCK SANATORIUM.

Duration of Treatment and Condition on Discharge.

		-									MO	- 1	5				
		3 11	Under 3 month	1S.	3—6		months.	6-12	months.	ths.	Mole 12 m	0	nths.	T	Totals.		Grand
		Ä.	T.	Ch.	Ä.	(Fi	Ch.	M.	压.	Ch.	M.	표.	Ch.	M.	Ή	Ch.	10tais.
	Quiescent	3	9	0	16	7	0	14	19	0	-	0	0	34	32	0	99
TE:	Not quiescent	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	2
Clas Min	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+	Quiescent	0	0	0	-	0	0	7	2	0	0	0	0	<u>က</u>	7	0	ıc
nb j	Not quiescent	0	0	0	_	0	0	0	0	0	0	0	0		0	0	
Class 010	Died in Institution	0	С	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	Quiescent	0	0	0	0	0	0	ις.	8	0	-	0	0	9	8	0	14
LB-	Not quiescent	0	23	0	0	3	0	7	5	0	0	1	0	7	11	0	18
Class Gro	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Quiescent	0	0	0	0	0	0	0	-	0	0	_	0	0	2	0	2
TB - p 3.	Not quiescent	61	0	0	2	-	0	က	3	0	1	0	0	∞	4	0	12
lass (	Died in Institution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3										_	_						120

In 43 out of 59 men discharged the disease was quiescent=72.88 per cent. In 44 out of 61 women discharged the disease was quiescent=72.13 per cent. 8 cases were admitted for observation; 4 were found to be tuberculous and are included in the above figures. The remaining 4 cases were discharged as being non-tuberculous.

#### MATERNITY AND INFANT WELFARE.

Rate of Infantile Mortality. This is the number of deaths under one year of age per 1,000 births. For 1934 it was 45.19. This is actually the lowest rate on record, but is practically the same as for 1928, which was 45.20. The rate for England and Wales was 59. The rate in the rural areas was 45.57 and in the urban areas 44.66.

The Urban and Rural Rates are shown in Table II. and the causes of the 248 deaths in Table A (at the end of the Report).

Table XIII. shows the months of death. These figures do not always exactly correspond with those in Table A, as the latter is taken from the Registrar-General's figures, and this Table is from figures given by the District Medical Officers of Health, obtained from the local Registrars.

This Table shows that 157 of the 247 deaths under one year of age took place before the child was a month old. This is 63.6 per cent. and of these 70.1 per cent. took place before the infant was a week old. In other words, a large proportion of the deaths are pre-natal in origin and illustrates the importance of pre-natal work.

The Midwifery Service. The number of certified midwives who gave notice of their intention to practise during 1934 was 325, consisting of 323 trained and 2 "bona fide" midwives.

The percentage of 1934 births in the County attended by midwives as midwives was 60.7, the remaining 39.3 per cent. being, for the most part, attended by medical men, a very small but uncertain proportion being attended by uncertified women.

During the year 817 visits of inspection were made to midwives, representing an average of 3.1 visits to each midwife.

#### Summary for all Midwives during the year.

Cases attended as	Midw	ife		3,332
Cases attended as	Month	nly Nurs	e	1,415
Doctor sent for fo	or Mot	her		1,170
Doctor sent for fo	or Chil	d		196
Stillbirths .				86
Death of Mother				18
Death of Child .		• • • • • • •		29

A doctor was called in under Section 14 of the Midwives' Act in 41.0 per cent. of midwives' cases.

During the year 1,026 doctors' accounts were paid under the contributory scheme, at a cost of £1,503 15s. 6d., while the contributory fees were £680 10s. 0d., the deficit payable by the County Council being £823 5s. 6d. The average doctor's fee per case was £1 9s. 4d. Fees amounting to £101 11s. 0d. were paid in 78 cases not coming under the scheme, and of this £35 6s. 6d. was recovered. Apart from the Central Office Expenses, the cost of working this section of the Midwives' Act for 1934 was, therefore, £889 10s. 0d. This is £176 16s. 0d. more than last year.

Maternal Mortality. This is included in two groups in the Registrar-General's returns and is so included in Tables A. and B. The two groups are "Puerperal Sepsis" and "Other Accidents and Diseases of Pregnancy and Parturition."

The deaths from these causes for each of the last 20 years are shown in the following

	1915	1916	1917	1918	1919	1920	1921	1922	19 <b>2</b> 3	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Puerperal Sepsis Other Accidents and	5	7	4	8	6	9	5	2	4	5	10	6	12	14	8	12	11	5	5	9
Diseases of Preg- nancy & Parturition		24	17	20	9	21	22	15	13	19	16	15	11	12	13	13	14	19	18	9
Total	23	31	21	28	15	30	27	17	17	24	26	21	23	26	21	25	25	24	<b>2</b> 3	18
Rate per 1,000 Births	3,41	4.65	3.90	5.14	2.64	3.63	3.60	2.45	2.49	3.69	4.21	3.46	3.83	4.36	3.69	4.31	4.84	4.31	4.45	3.28

During the year 9 cases of Puerperal Fever and 36 cases of Puerperal Pyrexia were notified. Arrangements have been made with different Hospitals to take in County cases and facilities are offered. During 1934 five cases were so admitted. The Hospitals with which arrangements have been made are the following:—

Bath Royal United Hospital, Bridgwater Hospital, Bristol Royal Infirmary, Chard Hospital, Minehead Isolation Hospital, Yeovil Hospital.

Ophthalmia Neonatorum. During the year 27 cases were notified. The distribution of the cases is shown in Table IV. Under the Public Health (Ophthalmia Neonatorum) Regulations, 1926, four cases were sent to Hospital under the County Council Scheme. All the cases are followed up for long periods, to ascertain if there is any impairment of vision. All cleared up completely.

Nursing and Maternity Homes. At the end of the year the number of homes on the Register was 37. They are all visited from time to time by Dr. Halliday, Miss Stewart or myself to see that the premises are in order and the requirements of the County Council complied with as regards management.

Milk Grants. Throughout the year milk was granted to necessitous cases under the Milk (Mothers and Children) Orders of the Ministry of Health. Grants were made to 2,054 cases, at an estimated cost of £653. Last year £511 was spent. The grants were carefully made and supervised, and given as allowances for specific public health purposes. Of the grants made, about 29 per cent. were to expectant mothers, 47 per cent. to nursing mothers, and 24 per cent. to children under five years of age. Great care is taken to prevent abuse and to see that the milk is taken only by the person for whom it is intended.

Ante-Natal Work. Arrangements have been made with six maternity homes in the County to take in cases at the cost of the County Council, when sent for certain special conditions such as abnormality of the mother or suspected difficult confinement or unsuitable or very inaccessible home. The maternity homes at which arrangements have been made for County Council cases are the following:—Bridgwater, Taunton, Minehead, Wellington, Bath and Yeovil, while cases were sent to Bristol General Hospital and several voluntary hospitals in the County.

During the year, 85 applications were received for assisted admissions to a maternity home or hospital. Of these 39 were accepted and 46 refused. The reasons for admission in the 39 accepted cases were:-

Actual or anticipated obstetric difficulty	• • •	25
Medical complication		14
Home very insanitary or inaccessible	• • •	8
(In 8 cases there were 2 difficulties)		
reatment and results were as follows:		

Normal confinement, no medical treatment required	15
Normal confinement, medical treatment required	7
Surgical or obstetric measures required	16

37 mothers made good obstetric recoveries, though 3 remain in poor health. One mother 28 healthy babies and one unhealthy baby were born. 9 babies did not survive.

Of the cases refused assisted institutional treatment, a number were difficult border line cases which, if funds were available, would have been included. The need for such accommodation has definitely increased, and more money will have to be spent on these cases in future.

Most of the Infant Welfare Centres have now started ante-natal clinics. Those at work in the areas under the County Council Scheme are Bridgwater and Clevedon, run directly by the County Council, and Crewkerne, East Harptree, Frome, Minehead, Pill, Shepton Mallet, Street, Wellington, and Wells, managed by Voluntary Associations.

Birth Control. This is conducted along the restricted lines authorised by the Public Health Applications for the most part go direct to Dr. Halliday. During the year 43 applications were received, of which 35 were seen and advised personally by Dr. Halliday; 1 was advised by another Medical Officer; 7 were referred to other clinics.

Work of Infant Visitors. The work has been on the same lines as in previous years. The births during 1934 were referred for visits as follows:-

Whole-time County Staff District Nurses	•••	•••	Rural. 135 3,009	Urban. 350 1,060	Total. 485 4,069
			3,144	1,410	4,554 ===

Special supervision is given to illegitimate children, while all the Infant Visitors are instructed to give their chief attention to the cases which, from their earlier visits, they find need special attention. Some cases, for example, are visited only every three to four months, others perhaps twice a month. Supervision is continued for all children to the end of their second year and for those found to require it up to school age.

Part I., Children Act, 1908. Since April, 1930, the supervision of children under seven maintained for reward, apart from their parents, has been transferred to the County Council and is administered by the Public Health Committee. All the Health Visitors have been appointed as Infant Life Protection Visitors, and this work has been organised in the County Health Department.

The passing of the Children and Young Persons Act, 1932, made a number of alterations as regards details, but has not affected the general principles of administration. For example, the age has been raised from 7 to 9 years, so more children are included and for a longer period, earlier notices of taking a child under the Act have to be given, while certain exemptions from supervision are removed.

The children on our Register, at the end of 1934, number 244, and as regards methods of payment, may be grouped as follows:—

Weekly payments in	• • •		• • •	• • •	• • •	• • •	221
Single lump sum payme	nt		• • •	• • •	• • •	•••	4
Otherwise paid for (mos	stly mo	onthly o	r irreg	gularly)	• • •	• • •	19
•		v		, ,			
							244

Those for whom a lump sum has been paid require and receive special supervision.

The number of foster mothers with one child only is 113; with two children—31; with three children—4; with four children—1; with over four children—4.

The foster mothers who run a regular baby home are therefore few and those with over four infants are one at Taunton with 34 at the end of 1934(authorised for 35); one at Bridgwater with 9 (authorised for 12); one at Freshford with 5 (authorised for 6); one at Lower Enmore with 5 (authorised for 6).

#### TABLE XIII.

#### DEATHS UNDER 1 YEAR OLD.

URBAN.	Under 1 week.	1—4 weeks (inclusive)	Total under I month.	1—6 months.	6—12 months.	Total Deaths under 1 year.	RURAL.	Under 1 week.	1—4 weeks (inclusive).	Total under 1 month.	1—6 months.	6—12 months.	Total Deaths under 1 year.
Bridgwater Burnham Chard Clevedon Crewkerne Frome Glastonbury Ilminster Minehead Norton-Radstock Portishead Shepton Mallet Street Taunton Watchet Wellington Weston-super-Mare Yeovil	6 2 0 0 1 3 1 0 0 1 0 3 3 9 1 2 1 1 1 6	1 0 1 3 1 2 0 0 0 0 1 0 6 0 0 0 2 1	7 2 1 3 2 5 1 0 0 2 0 4 3 15 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 0 2 0 0 0 0 0 0 1 1 7 0 1 0 3 2 2	2 0 1 0 0 1 0 0 0 0 0 0 0 0 2 0 1 2 1 2	14 2 4 3 2 6 1 0 0 3 0 5 4 24 1 4 3 17 11	Axbridge Bathavon Bridgwater Chard Clutton Dulverton Frome Langport Long Ashton Shepton Mallet Taunton Wellington Wells Williton Wincanton Yeovil	8 4 5 3 4 2 2 2 1 7 4 2 6 1 5 4	6 1 2 1 1 0 1 2 4 3 2 0 0 0 0 3 2	14 5 7 4 5 2 3 4 5 10 6 2 6 1 8 6	3 2 2 4 3 0 1 0 4 2 2 3 3 2 3 3 2 3	3 2 2 2 2 2 0 1 0 4 1 2 0 0 1	20 9 11 10 10 2 5 4 6 14 12 5 11 4 10
Totals	50	19	69	23	12	104	Totals	60	28	88	34	21	143

Infant Welfare Centres. At the end of 1934 the Centres in the County, exclusive of those at Yeovil, Taunton and Weston-super-Mare, which are outside the County Scheme, so far as I am aware, were:—

Centre			Day of week open	ed.	Frequency of Meetings.
Bridgwater	*****		Friday		Every week.
Chard	*****	****	Friday	•	1st and 3rd Friday in every month.  Doctor 1st Friday.
Clevedon	*****	••••	Thursday	*****	Every Thursday except 1st in month.  Doctor last Thursday each month.
Crewkerne	*****		Tuesday		Alternate weeks.
Curry Rivel	*****		Thursday		1st Thursday in each month.
Frome	*****		Tuesday		Every week. Doctor once a month.
Glastonbury	••••		Wednesday		1st and 3rd Wednesday each month. Doctor 1st Wednesday.
Harptree			Tuesday	••••	Alternate weeks.
Kilmersdon			Wednesday	•••••	Alternate weeks. Doctor once a month.
Long Ashton			Monday	*****	Alternate weeks. Doctor once a month.
Minehead	••••	•••••	Tuesday		Every week. Doctor 1st Tuesday in every month.
Pill	•••••		Wednesday	*****	1st and 3rd Wednesday in every month.
Portishead	*****		Friday		Alternate weeks.
Shepton Mallet	*****	:	Friday	•••••	Twice monthly and also twice monthly ante-natal.
Street	*****		Wednesday		Every week. Doctor alternate weeks.
Wellington	•••••		Thursday	*****	Every week. Doctor alternate weeks.
Wells		•••••	Tuesday '	*****	2nd and 4th Tuesday in every month.
Wraxali	*****		Friday	*****	1st and 3rd Friday in every month Doctor once a month (1st Friday).

The Centre at Bridgwater is the only one for which the County Council is directly responsible, but grants are paid to nearly all the others by the County Council and all these are visited during the year, while, so far as possible, a close connection is maintained between their work and the home visits paid by the infant visitors.

A separate ante-natal clinic is held at Clevedon by Dr. Pringle. 12 sessions were held during the year, 9 different cases attended with 14 attendances. Although expectant women outside Clevedon were invited these midwives only brought up 1 case.

#### Bridgwater Infant Welfare Work. The following gives some particulars of the work.

Births. During 1934, the number of births notified in the Borough (including still-births and cases later transferred to other districts) was 420; of these 375 were attended by midwives. A doctor was called in to help the midwife in 70 cases. 14 babies died during the year, a rate of 46.2 deaths per 1,000 births.

Home Visiting.	No. of children on visiting list	• • •	•••	• • •	• • •	780
, and the second	Total visits paid to infants	• • •	• • •	• • •	•••	3,745
	Ante-natal visits paid	•••	• • •	•••	• • •	145
	Total visits paid during 1934	•••	• • •	•••	• • •	3,890

Milk Grants. 64 grants were made, at an estimated cost of £117. As far as possible it is made a condition that cases receiving milk attend at the Centre so that the benefit of the grants can be estimated. Were it not for the milk grants a very considerable number of mothers would be unable to breast feed who now do so.

Centre.	Number of individual children who attended the Centre		524
	Number of individual mothers who attended the Centre		462
	Average weekly attendance of children (under 1 year)		84
	Average weekly attendance of children (1 to 5 years)		65
	Average weekly attendance of mothers	•••	70
	Total number of attendances (children 2,632; mothers 1,865)		$4,497^{\circ}$
	Total number of medical consultations for infants		559
	Total number of medical consultations for women (excluding		
	ante-natal)		78

The medical work was carried out by Dr. Halliday.

The figures show an increase under most items and that the centre is widely appreciated. Mothers also are attending more regularly. Arrangements for looking after the toddlers are not quite satisfactory, partly from a shortage of helpers but mainly because there is no proper room available for them.

A much better series of talks to mothers were arranged and given during the year. This is an important feature of the work, but their utility was diminished by the unsatisfactory arrangements for the toddlers. It is most difficult to keep the attention of mothers if toddlers are also present, while the noise is very considerable and unfair to the lecturer.

Mrs. M. S. Warry, as Hon. Superintendent, and a devoted band of voluntary assistants, all worked hard together with the official staff and make this centre a valuable one and of great help to the mothers. All the various activities have been continued and some extended. The one great drawback of the centre is the poor premises which are not well adapted for the work. Really satisfactory premises are badly needed.

Ante-Natal Work. This was carried on throughout the year both by home visits and by inviting attendance at the Ante-Natal Centre once a month. The total attendances were 122, with 92 women attending. This shows a marked increase, the expectant mothers attending increasing from 74 to 92. Maternity bags are loaned in suitable cases.

Baby Hospital, Bridgwater. At the beginning of 1934, there were 6 babies in the ward and during the year 27 were admitted.

The nature of the defects for which the babies were admitted were:—Prematurity 3; prematurity and debility 2; neglect 3; malnutrition 7; malnutrition and bronchial catarrh 2; broncho-pneumonia 1; malnutrition and dyspepsia 6; congenital cerebral defect; hare-lip and cleft palate 1; gastro-enteritis 1.

Of these cases, 1 died just after admission, one after a fortnight, and 8 babies were still in the Hospital at the end of the year. Of the remaining 23 cases, 1 with congenital mental defect was discharged not improved. The other 22 were discharged improved, and in nearly all of them our reports show that progress has been maintained. The average length of stay has been  $10\frac{1}{2}$  weeks. This little ward has been found most beneficial, and great credit is due to the Sister in charge for her devoted care of the individual babies.

Institutional treatment for children aged 1-5 years. The Baby Hospital is mainly for children under one year of age and no child over two is admitted.

Arrangements are made for a few children 2-5 years at other homes, and two excellent ones are available. One is at Wells, and took 9 children; the other is at Batheaston, and 2 children were sent there. The conditions for which sent were:—Malnutrition amounting to arrested growth 6; rickets associated with persistent bronchitis 2; rickets and intestinal catarrh 1; coeliac disease 1; debility following pneumonia with collapse of lung 1. All had failed to progress in their own homes, even with extra nourishment grants and special attention, but all made satisfactory progress when sent to these homes.

The average length of stay was  $10\frac{1}{2}$  weeks, and the cost for the 11 children £125.

Abnormal Children (including Rickets). The action of the County Council to deal with abnormal children started with rickets, and special steps were taken to detect all possible cases and arrange for appropriate treatment. On the whole the results were very satisfactory, although some definite cases failed to respond to treatment while our educational work to prevent rickets was not so successful as I hoped. Later it was arranged for all other abnormal children to be reported to the County Health Department, and steps were taken to obtain treatment for these cases. While the rickets work is continued the cases are here all dealt with together.

It is the duty of the Infant Visitors to report all infants not progressing properly and those with definite abnormalities. These children are dealt with in various ways. Many are seen by Dr. Halliday, and the appropriate treatment advised, some are seen by other members of the Staff, a few are referred to Infant Welfare Centres. A certain number have been seen by the County Oculist, as squint cases, and the appropriate treatment given. It is not contemplated to give treatment out of County funds, but the aim is that all children not progressing properly should come under review at the Health Department with the object that adequate treatment, if treatment is necessary, should be advised.

727 reports were received, including a few from doctors or through the Orthopædic Centres. They include a miscellaneous series of conditions and no scientific classification is possible. They have been grouped under the headings shewn in the table which gives an idea of the conditions to be dealt with.

TABLE XIV.

				Action	TAKEN	1		l	RESULT		
Condition.		No. Re- ported.	Seen at Flying Clinics.	Extra Nourish- ment.	Treat- ment by County.	Treated Private- ly or at local I.W.C.	Im- proved.	Still under Treat- ment & 'recent'	Not Im- proved.	Moved.	Died
Malnutrition		147	93	122	16 (a) 3 (f)	13	85	58	2	1	1
Rickets   early   with deform	itx	34	} 47	31 {	$\begin{array}{c} 3 & (f) \\ 1 & (f) \\ 31 & (c) \dagger \end{array}$	5	22	12	 2*		
Debility		89	56	78	5 (a) 1 (f)	18	62	26	_	1	
Catarrhal		68	48	68	1 (a) 1 (d)	20	39	24	2	2	1
Minor Postural Defects	• •	73	59	20	8 (c)†	15	37	24	3	1	_
Orthopaedic	• •	46	21	4	<b>42</b> (c)†	10	_	3	-	1	_
Eye Defects (squint 72, other 7)	• •	79	22		68 (b)†	6	_		1*	2	_
Tonsils, Otorrhoea, etc.	٠.	96	30	5	_	76	79	15	_	_	2
Other defects	• •	64	35	15	1 (a) 3 (c) 1 (e) 1 (g)	32	39	. 10	8	1	6
Totals		727	411	343	183	195	363	172	18	9	10

<sup>\*</sup> Refused treatment.

<sup>†</sup> Results not entered here.

<sup>(</sup>a) Mary Stanley Home.

<sup>(</sup>b) County Oculist.

<sup>(</sup>c) Orthopædic Clinic.(d) Referred to Tuberculosis Clinics.

<sup>(</sup>e) Ultra-Violet Light.

<sup>(</sup>f) Institution Treatment.

<sup>(</sup>g) V.D. Clinic.

The group "malnutrition" comprises the cases which fail to put on flesh, as a rule associated with a diet deficient in essentials but sometimes related to defective assimilation. The rickets cases vary somewhat with the observer, and fall into two groups. One is the early incipient rickets with symptoms that respond at once to treatment. The other is cases first noted with bony deformities and often in children whose previous history and general hygiene seems to be good. The catarrhal group includes babies suffering from frequent colds, bronchitis, etc. The tonsils, otorrhoea, etc., group includes acute mastoids, tonsillectomies, besides chronic and transient ear discharge. The heading has been found useful in ensuring that attention is paid to the condition, while inquiries are followed up until a satisfactory report is received. The "other defects" form a miscellaneous group many of which exhibit defects at birth, such as hare lip, cleft palate and spina bifida.

In addition to the cases in the table, reports were received from Infant Visitors on 117 cases of transitory illness, difficult feeding, etc. These were dealt with by milk grants, advice by letter, or at flying clinics, etc., and usually a further report was received that conditions were now satisfactory. These are not included in the table.

The table shows that many children get treatment with maltoline, oil and malt, etc., or are given treatment through one or more of the various County schemes. For others it is only necessary to keep them under special observation. The number dealt with through their private doctors is increasing. More children are being referred by doctors to the County Health Visitors or to Infant Visitors for help with extra-nourishment, regulation of diet, etc., while the doctor provides any medical treatment required. It is to be hoped that this friendly co-operation will continue to develop.

Flying Clinics. To enable these abnormal children to be seen, to give advice to ante-natal cases, and to help and encourage Infant Visitors in their work, the system of special occasional clinics by Dr. Halliday, and other medical members of the Staff, has been continued. This system of "flying clinics" is, I believe, the best method for dealing with the medical supervision of maternity and child welfare work in rural areas. It is, in my opinion, neither practicable nor desirable to have a system of small infant welfare centres covering the County, and I regard the system of flying clinics as far superior.

These clinics are not fixed in most instances, but are arranged irregularly as occasion arises and held at any convenient place. The occasion for holding a clinic may be a request from the Infant Visitor for advice for one or more cases, advice for any expectant mother, or our opinion that a local clinic would help to stimulate and assist the nurse-midwife, who is the Infant Visitor. At the clinic the Infant Visitor presents such of the infants and children under three years, about whom she is not satisfied as to their progress, mothers who seek medical advice for their children, possibly one or more expectant mothers. The Medical Officer also takes the opportunity to discuss the work and any difficulties. The method of procedure varies from the collection of a dozen or more children at the nurse's house, or at a room taken for the purpose, to the visiting of several scattered families in their own homes.

These clinics have the great advantage over ordinary centres, that there is a close association between them and the work of the Infant Visitor, also the cases which require supervision are all visited, not merely the children seen whose mothers bring them to the centre. As is well-known one considerable drawback of Infant Welfare Centres is that so often the very cases which should attend do not do so. With our "flying clinics" these are visited, if necessary in their homes, and all the circumstances are reviewed.

In quite a number of cases we are finding that the visits are so welcome and helpful that they are repeated at short intervals, and an irregular kind of centre is established. For example, at Banwell Dr. Pringle has developed a clinic which since February has met monthly. At this centre 80 individual children have attended with a total of 183 attendances. It has also been utilised to see 13 children of school age. The local nurse and infant visitor was keen and enthusiastic and the medical staff was glad to co-operate. If the need diminishes this temporary centre would be discontinued and work done elsewhere. These flying clinics have not the advantage of systematic educational talks, but we try and overcome this by our other propaganda work. For example, a combined flying clinic and educational afternoon was arranged with Miss Lamb at 7 centres, i.e., Somerton, South Petherton and Barrington, Highbridge, Martock, Keynsham, Banwell and Westbury. At most of these help was given by local voluntary workers and tea provided.

The work done at these Flying Clinics is shown in the following table:—

Medical Officer.	Infant Visitor	Sessions	Numbers seen.						
medical Officer.	Districts visited.	held.	Infants under 2.	Children 2–5.	Ante-natal	Post-Natal and others.			
Dr. H. M. Halliday Dr. P. Henderson Dr. G. H. Pringle Dr. W. R. C. Heslop Dr. H. A. Raeburn	92 38 30 13 7	107 92 74 25 9	534 595 398 117 48	368 475 334 178 67	62 18 12 1	42 - 1 -	1,006 1,088 744 297 115		
Totals	180	307	1,692	1,422	93	43	3,250		

The average number of children seen at each clinic was 10. The total number of children examined was 3,206, while in addition 177 mothers were given advice. The ante-natal attendances were 153. This is a further advance on the figures for the previous year, when 206 Flying Clinics were held. This extension is possible owing to some of the time of the School Medical Inspectors being available for this work, as well as Dr. Halliday.

Apart from these Clinics, a number of individual children under 5 years old are referred to the County Medical Officers, to be seen either at the schools, after or between medical inspections, or visited by them at their homes when they are in the area on school work.

In one way and another a material proportion of these abnormal infants obtain medical attention and the necessary treatment.

The total number of children now included on our registers as under special observation at the end of 1934 as "abnormal" is 1,123.

#### ORTHOPÆDIC SCHEME.

The County Scheme and the results of working during 1934 are described in considerable detail in my Report for 1934 as School Medical Officer.

The new cases seen and dealt with through the Clinics were as follows:-

#### Cases seen at the Clinics.

Tuberculosis of bones and joints						8
Spastic and other paralysis condit.	ions	•••	• • •	• • •	• • •	
Infantile paralysis (poliomyelitis)		• • •	• • •	• • •	• • •	11
Osteo-myelitis	•••	• • •	• • •	• • •	• • •	18
Congenital dislocation of the hip	• • •	•••	• • •	•••	* * *	5
Club foot	• • •	• • •	• • •	• • •	• • •	4
	• • •	• • •	• • •	• • •	•••	10
Other congenital deformities	• • •	• • •	• • •	• • •		23
Scoliosis	• • •	• • •	• • •	• • •	•••	8
Torticollis	• • •	• • •	• • •	• • •	• • •	12
Diseases and injuries of the toes	• • •	•••	• • •			17
Postural deformities:—						
General defects of posture		•••	• • •		30	
Flat foot (often with other p	ostura	al defo	rmities	)	39	
Knock knees (many old rick	cets)	• • •	• • •		60	
TO 1	•••	• • •	• • •	• • •	44	
0	•••	•••	• • •	• • •	- 44	100
Rickets (not specially postural)						173
Injuries and accidents		• • •	• • •	• • •	•••	9
Other defects and deformities	• • •	• • •	• • •	• • •	•••	16
other defects and deformities	• • •	• • •	• • •	• • •	•••	39
						353

The number of new cases seen is 17 more than in the previous year.

Great attention is paid to the prevention of crippling defects along the lines of the prevention of postural defects and their treatment in the very early stages, rickets prevention, and the prompt treatment of poliomyelitis before the paralysis has affected muscle utility or, when affected, to restore to use as completely as possible. Considerable steps are also in operation to reduce tubercular infections of bones and joints from human sources but not much is done to reduce bovine infections. The latter is mainly a national question and large scale measures are necessary.

#### HEALTH PROPAGANDA.

As in previous years, a great deal of work was done, most of it by Miss Lamb, B.Sc., the County Lecturer, but a good deal indirectly in various ways.

The Health Exhibition was used on a number of occasions but for various reasons not as frequently as usual. It was held at 10 centres, *i.e.*, Shepton Mallet, Bishop Sutton, Cucklington, Wambrook, Dunkerton, Broadway, Chapel Allerton, Othery, Puriton, and Priddy. At Shepton Mallet it was a Whole Day Exhibition in co-operation with the District Nursing Association and the Infant Welfare Centre. The cine-motor van of the Health and Cleanliness Council was also in attendance. The exhibition was well attended and a great success. The village Exhibitions were in some cases held in the schools with the co-operation of the school teachers.

During the year, Miss Lamb gave 28 talks to Infant Welfare Centres. Most were worth while, but in some centres there is too much noise, especially from the toddlers, and mothers are then inattentive. In addition, 7 talks were given at Flying Clinics.

As in previous years, a good many talks are given at Women's Institutes and the like. Twenty-two lectures were given to Women's Institutes and usually were well attended. Health talks were given to 5 different societies at Wellington, Seavington, Crewkerne, Bristol and Bishop Sutton.

The Nurses' Study Circles were continued during 1934, but considerable variation was exercised with regard to the subjects considered, while different speakers were utilised at the various centres. The meetings were held at Weston-super-Mare—6 lectures (average attendance 18), Minehead—5 lectures (average attendance 14), and Bath—5 lectures (average attendance 28). Books are available for home study.

Great attention continues to be paid to the school side of propaganda work. The issue of the new edition of the Handbook on Health Education is an important event, and 38 different evening meetings were held at 19 centres at which teachers attended and a full discussion took place in regard to the points in the Handbook and how they should be dealt with in practical work.

Two educational tours were carried out by the Dental Board in the schools, the arrangements being made by Miss Lamb.

During the year, 82 schools were visited and either talks given to the children or Health teaching discussed with the Head Teachers.

A further development has been holding Parents' Classes. These were started in the Spring 1934, and 2 centres have been held during the year. They are only possible with the co-operation of someone or some society in the locality. Both centres have proved a great success and were liked by the parents (all mothers) that attended. They were held respectively at Midsomer Norton and Timsbury, the average attendances being 40 and 12. Simple physiology and the influences of environment were the subjects and there were six meetings in each course.

Lectures and coaching to the pupil-midwives at the Mary Stanley Home are now a regular feature of the work, and 11 were given by Miss Lamb, and as many by Dr. Halliday and other Health Department Officers.

A few other lectures to Girl Guides, Tuberculosis Care Committees, etc., were given by Miss Lamb. Addresses to Tuberculosis Care Committees were given by various members of the medical side of the Health Department.

In addition to work specifically undertaken by Miss Lamb, a great deal of health propaganda work is performed by the County Health Department as part of its ordinary work. This especially applies to tuberculosis, infant welfare work and some aspects of school hygiene. There is always going on, in addition, a considerable sale or free distribution of health literature.

The Somerset issue of the journal "Better Health," which is an important feature of our propaganda work, resumed issue January, 1934, and was available all the year. Care is taken to supply it only to persons likely to be interested and, despite this restriction, its circulation continues to increase and at the end of the year nearly reached the 3,000 figure.

Propaganda work is carried out by many Voluntary bodies and special mention may be made of that of the Somerset Rural Community Council. Six lectures were arranged in various villages upon various public health topics, while a comprehensive tour was arranged in November of the Health and Cleanliness Council Cinemotor. Fourteen places were visited and the audiences ranged from 40 to 200. In the March previously, two other places were visited, with audiences of 40 and 100 respectively.

#### Mental Treatment Act, 1930.

Under the Act out-patient clinics have been established as set out below, while, by arrangement, the Mental Deficiency Acts Committee inspectors are available to visit the homes and link them up with the Mental Hospitals.

Place of Clinic.	Started.	Medical Officer.	No. of sessions.	Somerset cases seen.	Av.attendance per session
Taunton and Somerset					
Hospital.	April, 1931	Dr. W. S. Graham	22	16	5
Shepton Mallet and					
District Hospital.	April, 1931	Dr. A. Darlington	26	13	1
Weston-super-Mare					
Hospital.	December, 1932	Dr. J. McGarvey	26	16	1.7
Yeovil and District	<b>D</b> .				*
Hospital.	February, 1933	Dr. G. W. Mackay	24	24	4

These clinics can be and are very useful, and it is regrettable that they are not used for a very much larger number of cases and with a broader appeal as regards the types of cases sent for consultation.

#### GENERAL SANITARY ADMINISTRATION.

#### WATER SUPPLIES.

In previous reports I have had to draw attention to the many parishes with bad or inadequate supplies of water, a condition of affairs not satisfactory in a county naturally well supplied with water. I am glad to be able to report great advances made during 1934, to which several factors have contributed.

One of these has been the drought, which has served as a great stimulus to make people "water minded." Many parishes, content year after year to go along with none too pure water, of limited amounts and often of poor accessibility, have hesitated and often resisted obtaining an adequate supply for fear of added expense. A real shortage of water has converted many districts to the view that an abundant supply of pure water is an essential necessity.

The other important factor at work has been Section 57 of the Local Government Act, 1929, and in particular the way it has been operated in the County. The enactments as to de-rating have accentuated the difficulties of purely rural areas and made their resources so small that they are unable to pay for necessary services. Section 56 enables a District Council to assist financially parochial schemes and Section 57 enables the County Council to come to the assistance of such areas by making a contribution towards the cost of water supplies by suitable grants, the only condition being that they must have regard to the resources of the district and the circumstances of the case.

As first operated by the County Council, grants were made on a parochial basis the following being the principles adopted:—

- (a) That each application should be in respect of a scheme already approved by the district council.
- (b) That the district council should previously determine what proportion of the expenditure it is proposed to charge as special expenses on the parish or parishes concerned.
- (c) That each application be considered on its merits, but that the amount of the County Council's contribution shall not, as a rule, exceed 25 per cent. of the approved expenditure, and in no case shall the County Council's contribution exceed the sum contributed by the district council under section 56 of the said Act.

All schemes have to be approved by the County Council and the above and other financial requirements are included.

Grants on this parochial basis have been made up to the end of 1934, and to the end of June, 1935, for the following water supply schemes:—

<u> </u>					Estimated Cost	A
m						Annual Grant
To end of 1934.					of Scheme. (25%	of Loan Charges).
AREA.					£	£
Axbridge (Puxton)	•••	• • •		• • •	3,109	58
Long Ashton (Winford)	•••	• • •			9,315	102
Langport (Aller, Kingsbury	Episcopi,	Muchel	ney)	• • •	599	149
					13,023	309
To June, 1935.						
Bathavon (Peasedown)	•••	• • •			9,500	300
Shepton Mallet (Batcombe)	•••				2,020	26
,						
					<b>24</b> ,543	635

In considering the advisability of making a grant and in fixing the amount, regard is had to the burden upon each parish, the County Council Committee using a rough scale as to the amount of special expenses which could reasonably be carried by any parish.

This system of parochial grants is still in operation for suitable cases, but in June, 1933, the County Council decided that the systematic provision of comprehensive district schemes is a more economical way of providing rural areas with water. Their policy then became one of urging each rural district to consider the preparation of a general district water scheme so that the water supply conditions of each parish were considered and so far as possible met, preferably by large combined schemes. With this was to go the fixing of a uniform scale of charges to consumers throughout their district and treating the nett deficiency in the working of the scheme as expenditure for general purposes and not as special expenses. For approved district schemes on these lines, as contrasted with parochial schemes, the County Council is prepared to contribute an annual sum not exceeding one-third of the nett deficiency on the undertaking.

It will be obvious that a district scheme is a valuable stimulus to an adequate water supply since the parochial outlook with its perpetual balancing between an admitted need for good water and a dislike to having to pay adequately for it is far less operative. This valuable feature of district schemes has been markedly stimulated by the energetic action of the Chairman of the Public Health Committee, who has held during 1934 conferences with each district council in turn, at which he has explored with them the needs of their individual parishes and explained very lucidly the full bearings and advantages of the County Council proposals.

Up to the end of 1934, definite approval to district water schemes has been given as follows:—

## Areas on a District Basis at 31st December, 1934.

							Grants made by County
	Area.					Total estimated	Council (one-third of the
						future deficiency.	deficiency).
						£	${\mathfrak L}$
Bridgwater	Rural	District	• • •		• • •	3,005	1,002
Chard	,,	,,	• • •	• • •	•••	1,113	371
Dulverton	,,	,,	• • •	• • •	• • •	273	91
Wincanton	,,	,,	• • •	• • •	• • •	3,625	1,208
Yeovil	,,	,,	• • •	• • •	• • •	3,187	1,062
						11,203	3,734
Areas	added	to June,	1935.				
Clutton Run	al Dis	trict				2,783	928
Taunton	, ,	, ,		• • •		1,650	550
Langport ,	,	,, (A par	rochial	gran	t was		
previ	ously n	nade in r	espect	of pa	art of		
this a	area)		• • •	• • •		1,322	440
						16.050	E 650
						16,958	5,652
							***************************************

#### Rural Districts.

The water supply position as regards each rural district at the end of 1934 was roughly as follows:—

Axbridge. With the completion of the North Marsh schemes the greater part of this area is well supplied with water. The very large parish of Wedmore is only partially supplied, Brean and Berrow are inadequately supplied from the Burnham supply, while water conditions are unsatisfactory for Bleadon, Loxton and Hutton. Augmentation of existing supplies for Brent Knoll and Burrington are necessary, while Compton Bishop may require a piped supply.

The Rural District Council is engaged in proposals for various extensions and working out a pooling system of its own and at present is unwilling to have a uniform district water rate.

Bathavon. On the whole the area is well supplied with water. The Peasedown supply in Camerton parish has been unsatisfactory for a long time and a scheme is in hand to improve this supply for Peasedown itself and also for part of Camerton village and for Tunley. The Marksbury supply has shown contamination for years and several proposals have been considered, but no satisfactory scheme has yet been accepted. Steps are being taken to augment the private supply at Corston. Only a few parishes with small scattered populations are now without a piped supply.

Bridgwater. The Willoughby supply from the Quantocks has hitherto been the main source of supply. By an agreement scheduled to the Bridgwater Corporation Act, 1932, the Bridgwater Corporation supplies water in bulk to the Rural District Council as required, up to a limit of 200,000 gallons in any part of 24 consecutive hours. The water is derived from streams impounded by Bridgwater Borough and is pumped to the Rural District Council service reservoir through a 7 inch rising main. The Willoughby supply is augmented from this source and now supplies most of the parishes in the district. The new parishes supplied are Ashcott, Catcott, Chilton Polden, Edington, Enmore, Greinton, Moorlinch, Otterhampton, Shapwick, Spaxton and Stawell.

With the installation of this important supply no parish is in urgent need of a piped water supply, local supplies for the present being adequate. The loan was for £35,168 exclusive of subsequent extensions, and the Local Government Inquiry was held October, 1933.

Chard. A great improvement in the water resources of the district will be afforded by the new scheme to obtain water from Dommett springs, in the parish of Buckland St. Mary, and to supply the water by gravitation to the parishes of Ashill, Broadway, Donyatt, Ilminster (Without), Ilton, Lopen, Merriott, Seavington St. Mary, Seavington St. Michael, Shepton Beauchamp, and Stocklinch. The application to borrow £31,875 for these purposes was held October 2nd, 1934. By later proposals the supply is to be supplemented by water from the Ilminster supply. The County Council has also approved extensions at Winsham, Chaffcombe, Chard Parish and Buckland St. Mary.

When these schemes operate nearly the whole area will have a piped supply. Parishes which require further consideration, and may need a better water supply, are Chard Parish, two hamlets in Ilminster (Without), Wayford and Wambrook, but no direct evidence is available that existing supplies are unsatisfactory.

Clutton. Nine parishes are supplied from the Downside Abbey supply. A scheme is under consideration to supply 14 parishes in the area at an approximate cost of £50,000. These parishes are Camely, Chelwood, Chew Magna, Chew Stoke, Compton Martin, East Harptree, Hinton Blewitt, Litton, Norton Malreward, Publow, Stanton Drew, Stowey, Ubley and West Harptree.

When this scheme is completed the area will be well supplied with water.

Dulverton. Although a district naturally well supplied with water, shortage has been experienced in several parishes. In Dulverton itself the present sources have proved inadequate, and steps are in hand to provide additional water from a new source for Dulverton and Brushford. Withypool has needed a water supply for years and a satisfactory supply has now been obtained, but not completed. Winsford has plenty of water, but the distribution arrangements have been not altogether satisfactory and it is hoped this will be remedied. A new spring has been acquired for Exford which will make the present supply adequate. Skilgate has no piped supply and a scheme is under consideration. When these schemes are completed the area should be well supplied.

Frome. All the existing supplies are parochial, and at present there is no supply common to a number of parishes. The parishes of Rode and Norton St. Philip definitely require a piped supply and this is also desirable for Beckington. A scheme for supplying these three parishes from springs at Norton St. Philip is under consideration.

At Mells the two private supplies have been transferred to the Rural District Council. Both are gravitation, but the distribution has been unequal since the more abundant supply served the smaller population. This is now to be remedied by connecting the two supplies with a two-inch pipe. At Buckland Dinham there has been plenty of water but the distribution has been bad and steps are in hand to remedy this defect. An additional spring has been acquired and added to the Leigh-on-Mendip supply, which is now satisfactory.

This area will still have a considerable number of parishes only supplied from wells and local springs. When the three parishes (Rode, Norton St. Philip and Beckington) are supplied there is at present no evidence that definite shortage exists or that the quality of the water is unsatisfactory.

Langport. A number of parishes require water and during the drought have been severely affected. They can be divided into three groups:—

Six eastern parishes. These are Barton St. David, Charlton Mackrell, Kingweston, Babcary, Keinton Mandeville and Compton Dundon. The quality is bad in many instances and the quantity inadequate. A scheme is in hand to supply them but nothing definite has been arranged.

Four western parishes. These are Curry Mallet, Beercrocombe, Fivehead (including Swell) and Isle Abbots. There is an admitted shortage. They can be supplied either with Ilminster water or from the new Chard rural supply at Dommett springs, and during 1935 proposals were accepted to obtain the water from the new Chard supply as supplemented from Ilminster.

High Ham. This parish is supplied from wells and local springs, some of which are of poor quality, while there has been definite shortage. Pitney is supplied from wells and could with advantage have a piped supply.

The Barrington supply became very short and the water for Curry Rivel and other parishes supplied has had to be augmented from the Compton Durville supply. An additional supply for Curry Rivel is urgently required. Borings are being made while this supply is to be connected with the supply for the western parishes from Chard Rural and Ilminster.

All these different parishes need new supplies of water.

Long Ashton. A large part of this area is supplied with piped water from several water companies, and the only parts not reasonably well supplied are the following parishes:—

Backwell. Most of the parish is well supplied, but the group of houses at Downside only have rain water. The North Marsh (Axbridge) Rural supply runs near and two stand pipes from this supply have been arranged, but the water will not be taken into the houses.

Kenn. At present only supplied from wells of doubtful purity. Negotiations are in hand to extend the Clevedon Water Company supply to this area.

Kingston Seymour. Badly in need of a good water supply and the scheme under consideration is to extend the Yatton water supply to this parish.

Nailsea. Mostly well supplied, but the "West End" area depends only on wells, some of doubtful purity. Negotiations are in hand to extend the Bristol Water Company supply to this area.

North Weston. The Redcliffe Bay area, with about 300 houses, has a supply from the Portishead Water Company but the distribution arrangements are poor and it is only available for drinking water, and for other purposes rain water has to be used.

Winford. For many years there has been an urgent need for water in the Felton part of this parish, while during the drought shortage was experienced in other parts. An adequate supply of water has been obtained recently from a boring at Stanshall Lane, Felton, and the scheme now in hand is to supply this water to the different parts of the parish at an estimated cost of £9,315. The County Council has agreed to contribute to the cost of this scheme on a parochial basis.

Wraxall. Many of the houses on Failand hill have only rain water supplies. Some have ample storage and satisfactory collection arrangements but others are less satisfactory. Probably in time the Bristol Water Company supply will be extended to this area.

Shepton Mallet Rural. The greater part of this area already has a piped supply and on the whole the district is well supplied with water.

Pilton. For many years the quantity and quality has been unsatisfactory and the drought has brought realization of the need for an adequate supply and a scheme is under consideration.

Batcombe. The supply is unsatisfactory and the Rural District Council have a fresh supply under consideration (authorised in 1935).

Lydford parish is mostly from surface wells but apparently there is no shortage.

A small part of Stratton-on-the-Fosse is badly supplied.

Taunton Rural. Several recent extensions have improved matters in this area and the parishes needing further consideration as regards water supply are the following:—

Creech St. Michael and Ruishton. These adjacent parishes are supplied from local surface wells. No definite evidence is available of shortage or unsatisfactory quality but no complete surveys appear to have been made. The parishes do not consider a piped supply is required.

Thornfalcon and Kingston are similar to Creech St. Michael.

All the above four parishes are in the area of supply of the Taunton Corporation.

Otterford. The Bishopswood portion of this parish is not well supplied.

Lydeard St. Lawrence. There is an admitted need for water for this parish; a good supply has been found and steps to make it available are in hand.

Combe Florey. There is evidence of inadequacy for parts of the parish. The new supply for Lydeard St. Lawrence could serve this area or a supply be obtained locally.

Halse and Ash Priors. Both parishes are in the main supplied from surface wells. If further water is required it could be obtained from the supply for Lydeard St. Lawrence.

Wellington Rural. Although the majority of the parishes are supplied from surface wells, the population is scattered and the only parishes for which at present there is need for consideration are the following:—

Bathealton. The group of houses which constitute the tiny village are definitely inadequately supplied and during the drought many had no water at all. A piped supply for this village is required and should not be difficult to obtain.

Bradford and West Buchland. Both parishes are in the area of supply of Taunton Corporation. There is some, but not conspicuous, evidence of shortage and at least three wells in West Buckland are known to be contaminated.

Langford Budville. During the summer there was some shortage of supply for the Council houses due to local conditions, which could be remedied by a larger tank.

Sampford Arundel. One part of the parish was badly in need of water during the drought and in at least 4 cases the surface wells were completely dry, a condition of rare occurrence.

Wiveliscombe. The gravitation supply, which is the main source, is from a number of springs most of which are contaminated. This supply urgently needs chlorination and this could readily be carried out at very little expense.

Wells Rural. Wells St. Cuthbert Out. Parts of this parish are not well supplied.

Meare. This parish is badly supplied and many of the wells are contaminated. A piped supply is greatly needed.

North Wootton. The borehole has been deepened and the supply is said to be reasonably adequate.

Rodney Stoke. The Draycott part of the parish requires a piped water supply.

Westbury. Parts of the parish are not well supplied.

Priddy. Not a satisfactory supply.

Walton. Present supplies very inadequate and many liable to contamination. A piped supply urgently required.

Wookey. Wookey, apart from Wookey Hole, obtains its water from surface wells, and a piped supply is required.

Williton. This area is well supplied; the only parish which requires consideration is Monksilver. The supply for this parish is derived from a spring which ran short in the drought, at ordinary times there is no shortage.

Wincanton. This area is very well supplied, and in no parish is there evidence that a piped supply is required, but small extensions are necessary. Part of Pitcombe requires an extension of mains to cover the parish adequately.

Yeovil Rural. Several new supplies and extensions have been made during recent years and this area is well supplied.

West Coker. The present piped supply only serves about half of the parish, and the supply to the rest is unsatisfactory. Proposals have been approved by the County Council to extend the Odcombe supply to this parish at a cost of £2,460.

West Camel. Supplied from wells, many of doubtful quality. A piped supply is required.

Yeovilton and Chilthorne Domer are only supplied from surface wells, but detailed information as to adequacy and purity is not available. Only parts of Hardington Mandeville and Yeovil Without have piped supplies.

#### Urban Districts.

In general all the urban districts are well placed as regards the possession of good supplies of water, adequate for normal times. The two dry years of 1933 and 1934 have, however, put a great strain upon their resources and in many areas restriction of supply had to be enforced. Extensions of existing sources were under consideration in several districts.

# RIVER POLLUTION AND SEWAGE DISPOSAL.

The dry summer caused the rivers to be very low and the effects of any pollution were therefore accentuated. A great deal of attention was paid all the year, and particularly in the summer, to possibilities of pollution, and a number of cases exercised the attention of the Water and Sewage Sub-Committee. .

Extensive and serious river pollution resulted from three sources, all in the early part of June and from the same kind of pollution. One was in the river Isle from the discharge of unpurified or imperfectly purified, whey and milky liquids from the milk factory at Hort Bridge, Ilminster. The second was in the river Frome, from milky liquids from the milk factory by the railway station at Frome. The third was into a tributary of the river Chew, from unpurified whey and milk washings from the milk factory at Chew Stoke. All occurred from defective control at these factories and in spite of repeated visits and warnings as to the proper procedure. The sources of contamination were stopped within a period measured in hours but the harm had been done and great destruction of fish life and serious contamination of the river water resulted.

Legal proceedings were at once initiated by the County Council and were only withdrawn when very extensive undertakings were given in each instance, which should entirely avoid the possibilities of recurrence, while contributions were paid in all three cases towards restocking the river with fish.

The Taunton sewage works have long been a source of trouble. Additional works were under construction during 1934 and only completed by the end of November. A very much better effluent is now being discharged but the effluent still cannot be accepted as satisfactory.

All through the year the Wellington sewage works have given rise to serious pollution of the river Tone. This is recognised by the Wellington U.D.C. and a new scheme was prepared and accepted, but the work of reconstruction was not put in hand until the spring of 1935.

These two defective treatment plants with other minor contributory causes have made the river Tone the worst conditioned as regards pollution of all the streams in the County.

Schemes for the efficient drainage of Dunster, Sparkford, Queen Camel, Kingsbury Episcopi and Milborne Port have all been dealt with during the year. The drainage disposal scheme for the large Bason Bridge milk factory was efficient for many years but with the rapid enlargement of this depot became quite inadequate and river pollution was again being caused. This has been removed by the closure of the disposal works and the piping of all harmful effluents to the river Brue into tidal waters.

During the year the County Council made grants towards sewage disposal schemes for Sparkford, Queen Camel, Whitchurch and Milborne Port. All grants made have been, up to the present, on a parochial basis. The usual procedure has been on the basis of 25% of the nett annual loan charges and subject to the Rural District Council making a contribution at least equivalent to that of the County Council.

During the year many sewage works were visited as well as the various sources of contamination from industrial plant. A great many samples were collected and examined in the County Laboratory.

### ADMINISTRATION OF THE HOUSING ACTS.

The following shows the housing construction since 1921:—

Year.	Urban.	Rural.	Total.
	493	685	1178
1921			
1922	395	637	1032
1923	279	375	654
1924	432	551	983
1925	581	812	1393
1926	974	1217	2191
1927	1393	1442	2835
1928	960	718	1678
1929	857	1070	1927
1930	887	833	1720
1931	654	837	1491
1932	746	724	1470
1933	1070	1035	2105
1934	1450	940	2390

The figures show that the number of new houses constructed is the highest in the table, except for 1927. Table XV. shows for 1934 that 1,878 or 79% of them were built by private enterprise without any State assistance. This is far in excess of any immigration needs or to account for national increases of population and is one sign of the great change which is taking place in housing habits. This spate of private building is not confined to the towns but is also shown in most of the rural districts, although the chief rural areas to show much building are Bathavon and Long Ashton, both in the vicinity of large towns. The other big building increases have been in the urban areas of Taunton and Weston-super-Mare, and to a lesser extent in Yeovil, Burnham and Minehead and in the rural areas of Axbridge and Yeovil. In Bridgwater urban there has also been marked building, but mostly of State-assisted houses.

The only State subsidy is for so called slum clearance but it applies equally to single unfit houses. Table XVI. shows that 840 houses are reported as unfit, while in 387 cases demolition orders have been made. These figures are very considerably below those sent to the County Council last year and show that a great many houses remain to be dealt with. They also disclose considerable differences in the different districts. The present time offers special opportunities to get rid of all unfit and worn-out houses and to replace them by new houses at a comparatively low rent, as can be done with the aid of the subsidy.

\$40\$ TABLE XV. .NUMBER OF NEW HOUSES ERECTED DURING THE YEAR

ADEA.	With State	assistance.		
AREA.	By the Local Authority.	By other bodies or persons.	Otherwise	Total.
RURAL.  AXBRIDGE  BATHAVON  BRIDGWATER  CHARD  CLUTTON  DULVERTON  FROME  LANGPORT  LONG ASHTON  SHEPTON MALLET  TAUNTON  WELLINGTON  WELLINGTON  WILLITON  WILLITON  WINCANTON  YEOVIL	8 0 0 0 28 8 4 0 20 12 0 0 0 0 8 18	0 0 0 0 0 9 0 0 0 0 0	96 182 47 7 55 0 15 16 150 23 47 13 31 38 25 80	104 182 47 7 83 17 19 16 170 35 47 13 31 38 33 98
All Rural Areas	106	9	825	940
URBAN. BRIDGWATER BURNHAM CHARD CLEVEDON CREWKERNE FROME GLASTONBURY ILMINSTER MINEHEAD NORTON-RADSTOCK PORTISHEAD SHEPTON MALLET STREET TAUNTON WATCHET WELLINGTON WELLS WESTON-S-MARE YEOVIL	83 0 48 0 0 0 0 0 0 16 0 18 0 158 0 0 0	0 0 74 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30 56 7 0 4 31 14 6 52 53 16 10 25 209 30 14 16 390 90	113 56 55 74 4 31 14 6 52 69 16 28 25 367 30 14 16 390 90
All Urban Areas	323	74	1053	1450
County	429	83	1878	2390

TABLE XVI.
HOUSING INSPECTIONS.

Area.	Houses inspected for housing defects.	Houses specially inspected under Housing Acts.	Number found unfit.	Number defective but not unfit.	Demolition Orders made.
RURAL.					
AXBRIDGE	301	99	43	56	33
BATHAVON	242	8 <b>8</b>	42	103	16
BRIDGWATER	245	0	29	189	10
CHARD	358	157	61	186	35
CLUTTON	238	164	37	54	0
Dulverton	484	90	30	275	5
Frome	127	53	19	34	19
LANGPORT	443	156	14	391	6
Long Ashton	331	171	58	82	11
SHEPTON MALLET	196	58	7	43	55
TAUNTON	576 94	412	1	116	8
WELLS	312	57 260	63 28	31 116	6
TX7xx x xmoxx	104	21	9	12	0
WANCANTON	387	387	0	382	29
VECTOR	1353	960	27	591	33
TEOVIL					
All Rural Areas	5,791	3,133	468	2 <b>,6</b> 61	266
URBAN. BRIDGWATER BURNHAM CHARD CLEVEDON GREWKERNE FROME GLASTONBURY ILMINSTER MINEHEAD NORTON- RADSTOCK PORTISHEAD SHEPTON MALLET STREET TAUNTON WATCHET WELLINGTON WELLS WESTON-S-MARE YEOVIL	32 65 94 30 231 78 185 120 142 9 64	119 0 48 12 30 200 50 165 17 0 1 44 27 138 85 83 0 620 0	14 0 15 36 17 3 25 10 1 36 0 14 2 122 0 0 0 8 69	223 12 28 27 13 197 49 98 27 35 6 2 91 158 3 96 45 179 56	12 0 18 0 0 0 0 10 0 15 0 0 0 15 0 0 9 36
All Urban Areas	3,625	1,639	372	1,345	121
County	9,416	4,772	840	4,006	387

# Housing (Rural Workers) Acts, 1926 and 1931.

During the year ended 31st December, 1934, grants were authorised by the County Council under these Acts in respect of 121 dwellings, amounting to £10,920, in the following areas:—

t.	No. of Dwellings.	Am	Amount.		
			£.	s.	d.
		10	1,000	0	0
• •••	•••	1	100	0	0
		16	1,600	0	0
t	•••	11	1,100	0	0
	• • •	71	6,204	0	0
• • • • • • • • • • • • • • • • • • • •	• • •	9	620	0	0
		118	£ $10,624$	0	0
• •••	•••	3	296	0	0
		121	£10,920	0	0
	 st	· · · · · · · · · · · · · · · · · · ·	10 15 16 11 71 9 9 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

More than half the applications refer to houses in the Wincanton Rural District.

The total grants authorised under the Acts to the 31st December, 1934, amounted to £25,577 9s. 4d. in respect of 287 dwellings. Of these, grants amounting to £12,860 13s. 4d. in respect of 142 dwellings were paid prior to that date, and in the remaining cases the works were not completed or the grants were not accepted by the applicants. Grants amounting to £500 have been repaid by the applicants.

Since April, 1934, Bridgwater Rural District Council has been a separate authority under the Acts, and grants were made by that Council in two cases during the year.

#### SUPERVISION OVER THE FOOD SUPPLY.

A. Slaughter Houses and Meat Supervision. The Public Health (Meat) Regulations 1924, came into operation April 1st, 1925. Theoretically these regulations should enable every animal slaughtered for human food to be inspected and passed or rejected for human consumption. In practice this does not by any means occur, although the regulations mark a considerable advance in the control over meat.

TABLE XVII.
SLAUGHTER HOUSES.

Sanitary Area. (Urban).	Licensed.	Registered.	Total.	Sanitary Area. (Rural).	Licensed.	Registered.	Total.
Bridgwater Burnham Chard Clevedon Frome Glastonbury Ilminster Minehead Minehead Morton-Radstock Portishead Shepton Mallet Street Taunton Watchet Wellington Wells Weston-super-Mare Yeovil	1*	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14 9 7 P 3 8 6 5 P 8 4 6 5 12 4 9 9 1+P	Axbridge Bathavon	15 6 15 12 9 7 12 13 1 12 33 8 16 9 5 29	7 16 6 15 14 2 0 2 10 0 0 0 2 6 17 0	22 22 21 27 23 9 12 15 11 12 33 8 18 15 22 29
Total	55	65	120	County Total	257	162	419

P=Public Slaughter-house.

<sup>\*</sup> Closed at end of the year.

TABLE XVIII.

MILK PRODUCERS AND DISTRIBUTORS.

Sanitary Area. (Urban).		Producers.	Distributors.			Sanitary Area.		Producers.	Distributors.		
		Prod	Also Produ- cers.	Not Produ- cers.	Total.	(Rural).		Prod	Also Produ- cers.	Not Produ- cers.	Total.
Burnham Chard Clevedon Crewkerne Frome Glastonbury Ilminster Minehead Norton-Radstock Portishead Shepton Mallet Street Taunton Watchet Wellington		17 31 9 27 10 15 61 9 18 10 28 21 29 5 25 6	11 10 3 12 8 12 13 5 9 13 6 7 12 26 3 11	58 16 10 13 3 21 6 9 1 15 8 4 5 38 5 14 7	69 26 13 25 11 33 19 14 10 28 14 11 17 64 8 25 10	Wells Williton Wincanton		734 264 774 550 468 128 423 434 424 344 425 175 501 303 525 470	69 87 190 58 129 128 81 118 63 62 35 63 131 43 38 46	14 25 31 2 29 0 0 1 41 2 79 0 11 5 6	83 112 221 60 158 128 81 119 104 64 114 63 142 48 44 52
Weston-super-Mare		29 19	13 6	91 40	104 46	Total		6,942	1,341	252	1,593
Total		378	183	364	547	County Total		7,320	1,524	616	2,140

## B. Milk Supply. Table XVIII. gives the number of producers and distributors registered.

The Milk and Dairies Order, 1926, came into operation in October, 1926, and an account of its aims was given in my 1927 Report. Improvements have been effected as the result of the working of the Order, but only very slowly, and in some districts very inadequate attention is being paid to this important work. During the year six Clean Milk Demonstrations were given in the County by the staff of the Somerset Farm Institute. A Clean Milk competition was also carried on into 1934. The entries were 45.

During the year 444 samples of mixed milk, collected at the cowsheds, were examined for tubercle bacilli. Virulent tubercle bacilli were found in 14, a percentage of 3.15.

Except for one year, this percentage keeps very constant, the percentage figures for previous years being:—2.2 (1926); 2.18 (1927); 2.2 (1928); 2.67 (1929); 2.32 (1930); 2.2 (1931); 5.7 (1932); 2.8 (1933).

In addition to these 14 cases, reports on milk derived from Somerset, but found to be tuberculous by outside authorities, have been received in 8 cases. Two of these were from the London County Council, 4 from Bristol City, 1 from Middlesex County Council, and 1 investigation from London.

Of the 14 positive herds from samples examined in the County Laboratory in 7 the County Veterinary Surgeon found a cow with udder tuberculosis, usually at the first visit. In one instance two cows with udder tuberculosis were found on the same farm. In one instance no cow was found, but a cow sold after sompling and before inspection was traced out and examined and found to be giving tuberculous milk and when killed showed intensive udder tuberculosis. In another case, the cow with udder tuberculosis was only found by group sampling. In 4 instances no cows were suspected on clinical examination and bulk samples showed negative results, but animals had been sold before sampling and inspection and these were all old cows sold for slaughter and known to be diseased in two instances. In two cases there was complete failure to find the source of infection. No cows were suspected clinically and samples of the cows in groups were negative, while no cows were said to have been sold between sampling and examining.

Of the 8 positive cases from outside the County, in 5 instances cows with tuberculous udders were detected by clinical examination and in one case two positive animals were found. In one other case no tuberculous cow was found but a cow said to have a tuberculous udder was removed soon after the collection of the sample. In another instance no individual cow was suspected, but sampling in 6 groups gave one group of 5 cows positive. Three of these were negative but the other two were sold and could not be traced and no doubt included the infected animal. In the remaining case, the intimation from the London County Council was that the milk examined was positive, but the milk came from 6 herds only two being in Somerset. The detailed examination of the Somerset herds was negative.

The following table shows the examinations for the six years 1929-34:—

TABLE XIX.

SAMPLES COLLECTED OVER 6 YEARS (1929-1934).

Area.				Samples.	Milk containing tubercle bacilli.	Percentage positive.
Axbridge		•••	•••	${221}$	12	5.4
Bathavon		• •	• • •	108	4	3.7
Bridgwater				135	0	_
Chard				137	3	2.2
Clutton		• • •	• • •	117	$\stackrel{ ext{-}}{2}$	1.7
Dulverton				27	0	
Frome		- • •		69	6	8.7
Langport				147	4	2.7
Long Ashton				135	7	5.2
Shepton Mallet				105	5	4.8
Taunton				107	4	3.7
Wellington		• • •		40	0	_
Wells			• • •	126	3	2.4
Williton				67	0	
Wincanton		• • •		126	4	3.2
Yeovil	•••	• • •	•••	108	2	1.9
				1,775	56	3.2

While the total in considerable, the figures for the individual districts are too small to serve as a reliable index of the incidence of tubercle bacilli in the different areas. The variations do show that the presence of infective tuberculous cows, and so doubtless the prevalence of bovine tuberculosis, varies considerably in different areas. In general the figures suggest a higher incidence on the eastern side and in the neighbourhood of Bristol, Bath and Frome than on the western side in Dulverton, Williton and Wellington.

Graded Milks. The number of producers supplying graded milks showed a diminution of Grade A producers with a slight rise for Grade A (t.t.).

The following shows the figures at the end of the years referred to:-

	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Certified Milk	. 1	4	3	6	4	4	4	4	5	5	6
Grade A (tuberculin tested	) 1	5	7	9	8	6	6	6	8	8	11
Grade A	$\cdot \cdot 2$	4	6	11	12	14	14	13	10	9	8

C. Administration of the Sale of Foods and Drugs Acts. During the year 1,068 samples were examined. Of these, 29 were submitted by private individuals and Medical Officers of Health, and 15 were "Appeal to cow" samples. The following Table shows the nature of the 1,024 samples submitted by the police, excluding the 15 "Appeal to cow" samples.

TABLE XX.

Article.	Number examined.	Number genuine.	Number adulterated.	Per cent. adulterated.
Dairy Products —Milk	512 1 33 15 47 23 9 23 27 30 18 33 20 78 97 58	497 1 32 15 46 23 9 23 27 30 18 32 20 77 96 56	15 0 1 0 1 0 0 0 0 0 0 1 0 1 1 2	2.9 0 3.0 0 2.1 0 0 0 0 0 0 3.0 0 0 1.3 1.0 3.5
Total	1,024	1,002	22	2.15

The samples adulterated, as shown in the Table, were mostly milk, the adulteration of other products being very few. 15 milk samples were reported as adulterated. No legal proceedings were taken in 9, six were dismissed, and no convictions were obtained. The legal position as regards chemical milk adulteration remains very unsatisfactory.

TABLE XXI.

The number of samples analysed and the number adulterated during the past 14 years.

	Year.	Number examined.	Number adulterated.	Percentage adulterated.
Somerset	1921	1,084	67	6.2
,,	1922	1,075	. 50	4.65
"	1923	1,049	40	3.8
"	1924	1,045	48	4.6
,,	1925	1,042	37	3.5
n	1926	1,044	29	2.8
,,	1927	1,067	<b>3</b> 9	3.6
"	1928	1,043	25	2,4
,	1929	1,038	23	2.2
 n	1930	1,033	30	2.9
,,	1931	997	32	3.2
"	1932	1,013	22	2.2
"	1933	1,034	40	3.9
**	1934	1,024	22	2.15
England and Wales	1933	138,171	7,590	5.5

#### PUBLIC HEALTH LABORATORY.

The Laboratory continues to be extensively made use of by the different Local Authorities for the examination of water supplies, sewage samples, diagnosis of infectious cases, etc. It is also very valuable in connection with Tuberculosis, School Work, Venereal Diseases and other work directly under the County Councils.

During the past year 11,541 samples have been examined (excluding all food and drug samples) as follows:—

Drinking Water—					
Bacteriological examinations	••		• •	• • •	893
Chemical analyses			• •	• • •	60
Sewage, sewage effluents, rivers and stream	ms		• •		90
			• •	• • •	6,922
			• •	• • •	1,370
			• •	• • •	42
TT:	••,		• •	• • •	136
G . A TY I TO	••		• •		<b>7</b> 89
	lbumin,	casts,	etc.	• • •	168
Faeces for typhoid and dysentery	••		• •	• • •	41
NAT'11 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•••		• •	• • •	620
Milk for bacteriological examination (gene	eral) .			• • •	111
TOTAL COLOR OF THE			• •	• • •	118
Cerebro-spinal fluid and Post-nasal swabs .			• •	• • •	7
			• •	• • •	174
•				-	
			Tot	tal	11,541
				=	

Of the 6,922 swabs examined, 932 showed the presence of diphtheria bacilli; of the 1,370 specimens of sputum, 362 contained tubercle bacilli; of the 42 specimens of blood, 4 gave a posital Widal reaction; of the 136 specimens of hair, 47 contained ringworm fungi; and of the 789 specimens for venereal disease, 126 contained gonococci.

TABLE A.

Causes of, and Ages at Death during the Year 1934.

	NETT				VED AGE				THER
Causes of Death.	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	up-
Typhoid and paratyphoid fevers  Measles Scarlet Fever Whooping Cough Diphtheria Influenza Encephalitis Lethargica Cerebro-spinal fever Tuberculosis of respiratory system Other Tuberculous Diseases Syphilis General paralysis of the insane tabes dorsalis Cancer, Malignant Disease Diabetes Cerebral Haemorrhage, etc. Heart Disease Aneurysm Other circulatory diseases Bronchitis Pneumonia (all forms) Other Respiratory Diseases Peptic Ulcer Diarrhoea, etc. Appendicitis Cirrhosis of Liver Other diseases of liver, etc. Other digestive diseases Acute and Chronic Nephritis Puerperal Sepsis Other Puerperal causes	10 88 11 4 172 43 6 15 710 67 299 1148 18 295 184 201 55 36 32 37 16 39 112 223 9	0 2 0 7 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 0 4 0 0 1 0 1 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 0 1 6 2 0 1 3 6 1 0 2 1 0 3 0 0 0 0 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 3 3 1 32 0 0 0 0 2 1 1 1 1 0 0 0 4 1 0 0 0 5 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 11 1 1 87 19 1 35 2 5 30 6 2 2 18 5 5 3 3 2 2 14 15 6 9	0 0 0 0 0 28 5 1 38 5 3 8 261 16 69 263 7 43 20 50 18 20 4 11 6 9 35 66 0 0	0 0 0 1 0 42 1 0 11 1 1 4 408 47 224 841 5 249 150 90 30 11 4 9 8 28 45 137 0
Congenital Debility, Premature Birth Malformations, etc Senility Suicide Other violence Other defined diseases Diseases ill-defined or unknown	167 328 61 186 451	161 0 0 5 19 0	2 0 0 2 5 0	2 0 0 5 6 0	$\begin{array}{ c c c }\hline 2\\0\\0\\11\\23\\0\\\end{array}$	0 0 3 20 23 0	0 0 18 39 48 0	0 1 29 40 126 1	0 327 11 64 201 6
	5063	248	36	40	88	119	393	1183	2956

TABLE B.

Causes of Death at all Ages in each District during the Year 1934.

							RU	JRA:	LI	DIST	RI	CTS	<u>.                                    </u>												UR	BA	N J	OIS	TRI	CT	S.					
Causes of Death.	AXBRIDGE.	BATHAVON.	BRIDGWATER.	CHARD.	CLUTTON.	DULVERTON.	FROME.	LANGPORT.	Long Ashton,	SHEPTON MALLET.	TAUNTON.	Wellington.	Wells.	WILLITON.	WINCANTON.	Yeovil.	TOTAL RURAL DISTRICTS.	BRIDGWATER.	BURNHAM.	CHARD.	CLEVEDON.	CREWKERNE.		ILMINSTER.	MINEHEAD.	Norton-Radstock.	E.	SHEPTON MALLET. STREET.	TAUNTON.	WATCHET.	WELLINGTON.	Wells.	WESTON-SUPER-MARE.	TOTAL URBAN	DISTRICTS.	COUNTY TOTAL.
Typhoid & Paratyphoid Fevers Measles Scarlet Fever Whooping Cough Diphtheria Influenza Encephalitis Lethargica Cerebro Spinal Fever Tuberculosis of respiratory system Other Tuberculous Diseases Syphilis General paralysis of the insane tabes dorsalis Cancer, Malignant Disease Diabetes Cerebral Haemorrhage, etc. Heart Disease Aneurysm Other circulatory diseases Bronchitis Pneumonia (all forms) Other Respiratory Diseases Peptic Ulcer Diarrhoea, etc. (under 2 years) Appendicitis Cirrhosis of Liver Other diseases of liver Other diseases of liver Other digestive diseases Acute and Chronic Nephritis. Puerperal Sepsis Other Puerperal causes Congenital Debility, Premature Birth, Malformations, etc.	00 11 00 11 22 44 00 00 16 44 00 15 18 86 61 13 13 13 22 09 77	00 11 00 11 13 00 00 77 33 00 00 333 11 227 744 1133 88 122 11 22 22 11 33	0 0 0 0 0 0 6 1 1 0 1 37 2 13 36 0 0 12 5 6 3 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	00 20 00 00 4 00 0 10 10 10 9 22 0 55 99 11 11 12 00 00 00 00 00 00 00 00 00 00 00 00 00	0 1 0 3 0 0 3 1 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 4 2 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 2 0 0 0 0	0 0 0 0 8 0 0 0 8 0 0 0 6 3 0 0 6 13 47 1 1 1 1 3 0 2 2 0 2 4 13 0 0 0 4	0 0 0 0 2 0 0 0 1 1 1 2 0 0 0 1 2 5 5 5 0 0 0 1 2 0 0 0 1 1 4 8 0 0 0 0 0 0 0 1 1 4 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 1 0 5 0 0 0 7 3 0 0 3 1 2 1	0 0 0 0 0 0 0 0 0 0 0 5 2 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 0 0 0 0	M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 1 0 0 6 3 3 0 1 1 1 2 1 2 1 2 1 1 0 0 0 0 0 0 0 0 0	0 1 0 0 0 4 1 1 2 1 1 1 0 0 26 3 3 1 7 1 1 1 0 0 1 2 1 1 0 0 0 1 1 0 0 0 0 0 0	0 0 0 0 0 0 0 5 0 1 1 0 0 32 3 3 13 34 0 11 7 7 7 0 0 1 1 2 0 0 1 1 1 1 2 0 0 1 1 1 1 1 2 0 0 1 1 1 1	00 80 08 33 588 44 485 277 2 322 322 312 113 113 1113 1111 24 21 7 15 8 8 18 69 1123 60 1123 60 1123 60 1123 60 1123 60 1123 60 1123 60 1123 60 1123 60 1123 60 1123 6	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 0 0 1 0	0 0 0 0 0 0 0 0 0 4 0 0 0 1 27 2 12 24 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1 1 0 0 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 0 0 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 2 1 1 0 0 0 5 2 0 0 0 10 1 1 2 2 5 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 1 0 0 0 1 1 0 0 0 1 1 0	0 0 0 1 2 2 3 2 0 16 2 2 2 2 65 5 5 20 0 7 4 0 7 7 4 0 7 7 4 0 7 7 4 0 7 7 7 4 0 7 7 7 7	0 0 0 0 1 1 0 0 3 2 2 0 1 1 1 0 0 0 3 2 2 1 1 5 5 1 1 5 2 2 0 4 4 0 0 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 2 1 5 7 300, 7 0 87 11 10 28 35 20 2 37 11 15 7 7 20 8 21 31 1 15 7 7	0 10 11 13 10 88 11 4 43 6 15 710 67 67 299 448 18 295 884 201 555 36 31 4 37 16 39 30 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
Senility Suicide Other violence	28 2 10 30 1	4 4 6 18 0	20	13 1 11	7 1 10 14 0	1 0 4 0	10 1 6 4 0	7 2 5 14 0	12 3 10 18 0	4 5	16 2	2 1 2 10 0	9 4 3 2 13	0	6 13 4 5 20 0	2 7	93 177 35 114 233 3	7 21 3 13 16 0	1	2 9 0 3 3	2	0	5 2 0 2 0 4 2 7 3 0 0	0	0 3 0 1 7	1	0 4 3 3 0 0 3 1 7 4 0 0	0 1 3	18 19 3 15 44	1 7 1 0 1 0		4 1 1 2	21 1 5 11 45 1	0 15	51 3 26 72 1	67 28 61 86 51 7
All causes 2	270	243	208	150	192	52	26 1	159 2	18 1	32 2	31	98 1:	27 1	521	90 1	94 2	2742 2	2171	286	64 1	42 4	3 15	4 57	25	75 1	_		55	328	26 1	03 6	7 42	-1	~	21 50	

Table showing, for each Rural District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

TABLE C.

_										
	DISTRICT.	Acres.	No. of Births.	No. of Deaths.	No. of Deaths Under I Year.	Population. (Mid-Year)	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
RU	RAL:—									
1.	Axbridge	90,551	331	270	20	22,340	14.82	12.09	9.43	60.4
2.	Bathavon	46,276	314	243	9	22,640	13.87	10.73	9.01.	28.7
3.	BRIDGWATER	86,769	265	208	12	16,560	16.00	12.56	9.67	45.3
4.	CHARD	54,600	169	150	12	11,331	14.91	13.24	10.86	71.0
5.	CLUTTON	42,641	237	192	.10	15,710	15.09	12.22	10.51	42.2
6.	Dulverton	78,980	<b>7</b> 0	52	2	4,570	15.32	11.38	9.79	28.6
7.	FROME	51,718	142	126	5	9,590	14.81	13.14	10.91	35.2
8.	LANGPORT	59,407	175	159	4	12,470	14.03	12.75	9.82	22.9
9.	Long Ashton	46,515	254	218	6	19,270	13.18	11.31	9.95	23.6
10.	SHEPTON MALLET	47, <b>7</b> 77	163	132	14	10,030	16.25	13.16	10.79	85.9
11.	Taunton	70,682	220	231	12	16,840	1 <b>3</b> .06	13.72	10.84	54.5
12.	WELLINGTON	37,911	106	98	5	7,345	14.43	13.34	10.54	47.2
13.	WELLS	57,175	157	127	12	9,415	16.68	13.49	10.93	76.4
14.	WILLITON	97,364	137	152	3	12,100	11.32	12.56	9.80	21.9
15.	WINCANTON	64,540	208	190	10	15,990	13.01	11.88	9.86	48.1
16.	YEOVIL	53,495	256	194	10	16,490	15.52	11.76	10.00	39.1
Tota	als of Rural Population	986,401	3,204	2,742	146	222,691	14.39	12.31	10.09	45.6

TABLE D.

Table showing, for each Urban District, the number of Births and Deaths, the number of Deaths of Infants, also the Birth Rate, Death Rate, and Rate of Infantile Mortality.

DISTRICT.	Area.	No. of Births.	No. of Deaths.	No. of Deaths Under 1 Year.	Population. (Mid-Year)	Birth Rate.	Death Rate.	Standardized Death Rate.	Rate of Infantile Mortality.
URBAN :—	Acres.		<i></i>						
1. Bridgwater	1,677	303	217	14	17,950	16.88	12.09	10.64	46.2
2. Burnham	<b>2</b> ,246	80	128	3	7,842	10.20	16.32	11.59	37.5
3. Chard	1,030	48	64	3	4,414	10.87	14.50	11.17	62.5
4. CLEVEDON	3,296	69	142	3	7,561	9.13	18.78	11.83	43.5
5. Crewkerne	1,291	38	43	1	3,524	10.78	12.20	10.13	26.3
6. Frome	1,194	94	154	6	10,400	9.04	14.81	11.70	63.8
7. GLASTONBURY	5,019	61	57	2	4,558	13.38	12.51	11.01	32.8
8. Ilminster	531	28	25	0	2,272	12.32	11.00	9.35	0.0
9. MINEHEAD	2,816	55	75	0	6,262	8.78	11.98	9.22	0.0
10. Norton- Radstock	3,370	157	101	3	11,080	14.17	9.12	8.66	19.1
11. PORTISHEAD	911	46	59	0	3,895	11.81	15.15	12.27	0.0
12. Shepton Mallet	2,278	61	48	5	4,270	14.29	11.24	9.33	82.0
13. Street	3,069	48	55	4	4,409	10.89	12.45	11.08	83.3
14. TAUNTON	2,428	354	328	24	26,550	13.33	12.35	10.74	67.8
15. WATCHET	493	42	26	1	2,083	20.16	12.48	9.86	23.8
16. Wellington	2,211	75	103	3	6,785	11.05	15.18	11.39	40.0
17. WELLS	1,336	<b>7</b> 9	67	3	5,404	14.62	12.40	9.30	38.0
18. Weston-s-Mare	4,923	381	426	16	32,330	11.78	13.18	10.02	42.0
19. YEOVIL	2,257	265	203	11	19,220	13.79	10.56	10.88	41.5
Totals of Urban Population	42,376	2,284	2,321	102	180,809	12.63	12.84	10.53	44.7
Administrative County	1,028,777	5,488	5,063	248	403,500	13.60	12.55	10.29	45.2
England and Wales,	1934	******	••••	11000	•••••	14.8	11.8	11.8	59